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UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF CALIFORNIA

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CORONAVIRUS REPORTER,))	CAND Docket: 21-cv-5567-EMC
CALID INC,)	
PRIMARY PRODUCTIONS LLC, DR. JEFFREY D. ISAACS,)	SHERMAN ACT ANTITRUST
on behalf of themselves and all others similarly situated		CLASS ACTION
	Plaintiffs,)	
)	AMENDED COMPLAINT
VS.)	
ADDIEDIC)	
APPLE INC., FEDERAL TRADE COMMISSION)	
	Defendants.	
)	
)	DEMAND FOR JURY TRIAL
)	

PLAINTIFFS' AMENDED COMPLAINT FOR DAMAGES AND INJUNCTIVE RELIEF

I. INTRODUCTION

- 1. To date, Apple has evaded antitrust enforcement by making their technology sound a whole lot more complicated than it is. There would be no question about Apple's guilt under the Sherman Act, if we viewed the smartphone monopoly as a hypothetical television monopoly. Imagine a world with two television manufacturers – Company A(pple) and Company B. The televisions use incompatible recording and broadcasting standards. To reach an audience, a film producer (developer) must record their movies using both A & B standards. Company B lets any movie be played on its television sets (sideloading), but Company A requires each film obtain their approval. Company A endusers must download movies directly from a proprietary "Movie Store," which "notarizes" movies. Company A routinely censors films it does not agree with politically, even public-health announcements (Plaintiff Coronavirus Reporter). This "curation" blocks 60% of the country (and 80% of movie ticket sales) from seeing important content, as they are locked into their Brand A television sets for various anticompetitive reasons. Company A even steals movie scripts it likes (Facetime 15) and buries the original (Plaintiff Jeffrey D. Isaacs' WebCaller) in their cutting-edge "Movie Store" that they ironically refer to as an "economic miracle."
- 2. This class action seeks to redress the injustices Apple committed to the developer base that the monopoly necessarily relies upon to exist. Documented herein are the anti-competitive business practices in the Sherman Act-regulated marketplace for smartphone apps that have become the norm at Apple, and how the company has censored and oppressed app developers Coronavirus Reporter, CALID (CALendar IDentifier

- scheduling platform), Primary Productions, Dr Jeffrey Isaacs, and countless other class members that shall be identified in discovery.
- 3. Everybody knows a loved one or a friend whose life was touched by Dr. Roberts, Plaintiff Coronavirus Reporter's Chief Physician. Anyone who ever had a cardiac bypass, stenting procedure, or was admitted to an Emergency Department on concern of myocardial infarction ("heart attack") almost certainly had laboratory blood analysis to detect damaged cardiac muscle tissue. In the 1980s, Dr. Roberts pioneered the MBCK blood test used for two decades as a "gold standard," and which directly laid the foundation for the subsequent troponin test widely used today. Dr. Roberts' CV narrates a career of saving lives. Notably absent from is the Coronavirus Reporter app, the lives it could have saved, and could still save, because Apple improperly blocked this app in February 2020 to develop their own.
- 4. Today, Apple wields authoritarian control over the vast network of interconnected smartphones that, when combined, represent an extraordinary computational-communications capability ("network effect"). Our Amended Complaint calls this the smartphone enhanced national Internet userbase. The United States government spent decades building DARPA, now known as the Internet. Subsequently, we as a nation collectively invested in putting a smartphone, an amalgamation of a touchscreen, sensors, software, and communication devices, in the hands of nearly every citizen, forming a network with capabilities amounting to fantasy of science-fiction of prior generations.
- 5. We, the Plaintiffs, assert that these vast network capabilities are the property of the citizens the end users of Apple's iPhone. These users should enjoy unrestricted use of

- their smartphones to run the innovative applications, written by third party developers, that ultimately are the raison d'être of this network.
- 6. Two decades ago, the United States Department of Justice expended considerable resources to prosecute the Microsoft Corporation for alleged anti-competitive activity that amounted to bundling the Explorer web browser too prominently with the Windows operating system. Notably, Microsoft did not restrict each and every software developer from directly selling software to PC consumers. Microsoft did not require programmers to submit their applications for approval, in order to distribute software in a brick-and-mortar store. Microsoft did not reject 40,000 software applications per week, wasting millions of person-hours of labor. Microsoft did not demand an economically inefficient 30% tax on all PC software. And Microsoft did not charge \$99/year to every aspiring computer programmer, many of whom are students or entrepreneurs with no income or benefits, simply to access the Windows SDK. There seems to be little question that had Microsoft committed the above antitrust violations, public outrage would have ensued, the company would have been broken up, and likely, faced criminal charges.
- 7. Apple, by breathtaking comparison, has secured its position as the wealthiest company in the world by committing all of those offenses under the guise of popularity and commitment to quality. When announcing the App Store's debut, Steve Jobs promised that the App Store fees were only intended to cover Apple's costs of running the store. Today, this is no longer true under Apple's new management, which compensates for the tragic loss of Steve Jobs and his gift for innovation by seeking reckless profits on the heels of the success that Apple enjoyed with the iPhone. This stealth transition occurred relatively quickly, over the last ten years. This District is currently adjudicating antitrust

- cases against Apple concerning the thirty percent App Store commission, which Elon Musk succinctly remarked "are a *de facto* global tax on the Internet."
- 8. This Amended Complaint describes Apple's monopoly of smartphone enhanced national Internet access devices¹. It documents case studies of five apps all withheld from the public by Apple's anticompetitive policies. Representing a class of developers who directly suffer from Apple's ever-expanding power grab is a diverse group of Lead Plaintiffs' apps: Coronavirus Reporter, CALID, Bitcoin Lottery, WebCaller, and Caller-ID.
- 9. Notably differentiated from other pending Apple antitrust litigation, we assert first-to-file class action claims that Apple's censorship of free apps, such as Dr. Roberts' Coronavirus Reporter, constitutes Sherman Act and RICO violations directed against the institutional smartphone application software marketplace. These claims are long overdue. Apple's dictatorship-like control over free apps from Coronavirus Reporter to Parler where Apple notoriously squelched an entire political party, must come to an end.
- 10. As the US House of Representatives Subcommittee on Antitrust exposed earlier this year, Apple, when it suited them with Chinese developer Baidu, appointed two Apple employees to help them navigate the murky waters of the Apple App Store. The Plaintiffs and class members in this case, however, weren't so lucky to obtain such hand-holding—their millions of person-hours of work were tossed away by Apple, with improper rejections that, according to the same US House report, even astonished many Apple

¹ Five downstream markets are also first-to-file in this pleading: 1) the institutional app market (i.e. wholesale app competition), 2) the iOS institutional app market (iPhone app single-product wholesale marketplace), 3) iOS notary stamps market (permission tokens to launch iOS apps), 4) iOS onboarding software ("Mac Finder" capability disabled on all non-enterprise iOS devices), and 5) access rights to the iOS userbase.

- employees. To emphasize, while other litigation concerns Apple's fees this case addresses the significant loss of competitive efficiency, i.e. millions of person-hours, that results from Apple's denial of some 40,000 apps weekly.
- 11. Nearly 60% of U.S. internet users and 80% of paid internet commerce access the national internet backbone using Apple devices. For these users, their access to the internet relies upon using an iOS device. As such, Apple operates a *de facto* monopoly for smartphone internet access devices. Downstream from this market is the national smartphone app distribution market, of which Apple's App Store controls 80% of app revenue. The distribution market is two sided; the consumer facing side and the institutional side. Apple is a monopsony purchaser of apps on the wholesale B2B side. When a free app is denied approval by Apple, the developer is paid nothing for their potentially valuable app. This would be analogous to a movie studio, or streaming service, refusing to buy a film.
- 12. As an alternative market definition, we assert the single-product iOS Institutional App market in the United States. The iOS Institutional App market is downstream from the single-product iOS Smartphone Enhanced Internet Access Device marketplace. Similar to the aforementioned national app market, the iOS App market is two-sided, with a retail side, aka the App Store, and the institutional side, Apple's direct purchases of apps. Apple, by definition, is a monopsony buyer of apps for the App Store.
- 13. The Sherman Act prohibits monopolization of any part of the trade or commerce among several States, or with foreign nations. Likewise, the Sherman Act prohibits every contract or conspiracy in restraint of trade among several States, or with foreign nations.

- Apple has restricted trade, communication, and free information exchange, all in violation of the Sherman Act, when it disallowed Plaintiffs' reasonable applications.
- 14. Under Sherman and RICO, the Amended Complaint seeks a permanent injunction to unambiguously end Apple's unilateral control over the software permitted to run on its user's devices. To be clear, this effectively ends Apple's exclusive monopoly, and monopsony, over access to the smartphone enhanced Internet, and institutional software marketplace, respectively. No longer will Apple reject apps by the millions per year. After this injunction is granted, the increased selection of innovative apps brought on by this newfound freedom will be truly breathtaking. The incremental network effect, i.e. the improved utility of the smartphone enhanced Internet, will substantially contribute to the economy, and moreover, quality of experience of smartphone owners. They will finally derive the full benefit of the global device infrastructure they paid for. Apple's "walled garden" will finally be allowed to flourish.

CLAIM THEORY OVERVIEW

15. Plaintiffs and their counsel have worked tirelessly to analyze the various claim theories currently under litigation against Apple, and have structured the "smartphone enhanced internet (commerce and information) access device" abstraction. Using the definitions identified in the following diagram, it becomes evident how the Sherman market definitions apply to the iPhone & iPad (iOS) ecosystem:

Monopsony Theory for iPhone

A smartphone is an ecosystem of hardware AND software

The iPhone exists within the marketplace for smartphones.

•Apple bundles its own apps with the iPhone, e.g. FaceTime.

•Apple bundles free apps with the iPhone,
usually purchased at a price of \$0 from developer.

Developer rewarded with advertising stream revenue.

•Apple bundles (at IAP price) 3rd Party paid apps, e.g. MS Word.

Apple conveys 70% commission to 3rd Party.

Anti-Competitive App Distribution (Sherman Violation)

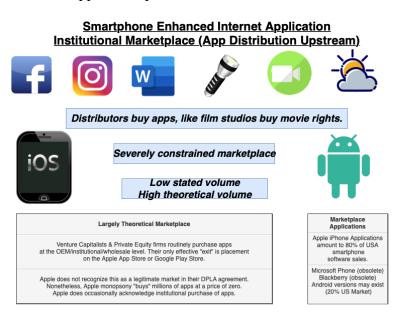
Apple buys some free apps at substantial prices(e.g. weather prediction).
 Apple disallows or ranking suppresses competitor apps.
 Apple assists some developers (e.g. Chinese Government), blacklists others (Class Action Plaintiffs)
 Apple retains 30% off all paid app IAPs.
 Developer and consumer are at a full disconnectonly way to get an iPhone app is "bundled" with the iPhone, i.e. approved by Apple.

A disallowed or suppressed app is underpaid by the Apple monopsony

16. In this schematic, free apps are represented just like their paid counterparts. The marketplace here is the smartphone internet access device. Most competitors in this space have succumbed to Apple – diagrammed are Windows Phone and Blackberry. Google retains under half of the US market for smartphones. Apple controls nearly 80% of the software purchases that take place on this device group, according to publicly available data. Likewise, it is asserted that a similar proportion of overall commerce transactions occur over this device group. In this model, Apple sells to the consumer a bundle of hardware and software. The consumer is unaware of the existence of developers, if they

aren't approved and promoted by Apple. The merchant of record for all iOS app purchases is indeed Apple. Counsels' review of other pending antitrust claims in this District, and others nationally, neglect to formulate Sherman definitions that equally apply to free apps – a major component of the ecosystem and a significant source of lost "person-years" of work and innovation that is the pride of our Country.

17. After applying these definitions, we then proceed to specification of the National Institutional App marketplace. Technically, this marketplace is the wholesale/B2B side of a two-sided National App Marketplace:



Anticompetitive App Marketplace Dominated by Apple

•Apple buys most free apps at a price of \$0 from developer. Developer rewarded with advertising stream assignment. •Apple buys 3rd Party paid apps, e.g. MS Word, upcharges 30%. ·Consumer locked in to their iOS device, can't run Android version ·Apple occasionally purchases free apps for own-brand portfolio. Dark Sky weather app bought for undisclosed sum, removed from Android. Apple frequently copies apps (i.e. Flashlight) eliminating rivals. Preferred partners (China Baidu, Stanford, etc) offered valuable chaperoning. Apple adds SDK functions permitting new classes of apps, favoring own (Tile / AirTag). •Cronyism by App Store employees obtains kick-backs from friends' apps. Not officially sanctioned by Apple shareholders ·Rejects 40,000 apps a week; developers work millions of person-hours for no pay or benefits. Competition would vastly increase app quality & developer fairness

18. Lastly, we define the single-product marketplace for iOS devices, a subset (80%) of the US smartphone internet access device marketplace. Downstream from that single product marketplace is the US iOS Device App marketplace. That marketplace, like the broader App Distribution Marketplace, is two-sided, with a retail side (the App Store) and an institutional side, which is pictured below:



Anticompetitive App Marketplace Exclusively Controlled by Apple

Apple buys most free apps at a price of \$0 from developer.
 Developer rewarded with advertising stream assignment.

 Apple buys 3rd Party paid apps, e.g. MS Word, upcharges 30%.
 Under Kodak theory, there are no competitors in this marketplace
 Apple occasionally purchases free apps for own-brand portfolio, but usually pays nothing to devs.

 Apple frequently copies apps (i.e. Flashlight) eliminating rivals.
 Preferred partners (China Baidu, Stanford, etc) offered valuable chaperoning.
 Apple adds SDK functions permitting new classes of apps, favoring own (Tile / AirTag).

 Cronyism by App Store employees obtains kick-backs from friends' apps.
 Not officially sanctioned by Apple shareholders
 Rejects 40,000 apps a week; developers work
 millions of person-hours for no pay or benefits.

Competition would vastly increase app quality & developer fairness

- 19. Apple, of course, does not acknowledge either of these institutional app markets in their DPLA agreements. We refer to it as a "hypothetical" app market, but in fact, it is a very real and severely bottlenecked marketplace that would otherwise be thriving, but for Apple's restrictions on interstate commerce. The company has spent a decade writing contracts of adhesion consumer and developer "agreements" which use wholly different terms, shield Apple of vast liability from third-party apps, while simultaneously collecting the bulk of profits. The DPLA and App Store employ language that a free app is "For Sale" or "Available" through the App Store, after gaining "approval" by Apple for "adherence to iOS standards." Written by Apple's law firms, the DPLA intentionally obfuscates the reality of the underlying app transactions. This has resulted in profound difficulty in bringing antitrust actions against the company. The only marketplace, the only seller of apps to end-users, is Apple itself. Understanding this key fact makes the rest of the antitrust theory flow logically. If Apple is the only seller of apps, just like they sell a proprietary bundle of hardware (GPS, camera, accelerometers, battery, screen, etc), then we understand that Apple is a monopsony buyer of apps. The vast majority of apps are purchased through coercion for a zero-dollar (\$0) price from Apple, because free apps constitute 83% of all apps.
- 20. In other words, vast amounts of labor millions of person years of developers compete to sell their apps for free to Apple². The reward is an assignment of advertising identifier code to the developer, and brand goodwill.

² The actual terms of an app sale from an independent developer to Apple are rather complex. Apple receives a license to distribute a particular version of an app's source code, in a bundle that is free to purchasers of the iOS ecosystem. It would appear patents, trademarks, advertising assignments and other intellectual property are retained by the developer. Expert opinions on the true nature of these transactions – which almost certainly differ from Apple's terms specified in the DPLA – will be forthcoming in discovery.

- 21. Apple might claim they never purchase apps, because their DPLA agreement doesn't use this terminology. The DPLA is a legally void, monopolistic contract of adhesion, in large part because it uses false terms and definitions to purport the existence of an "independent, voluntary developer" base. The reality is, developers are told how to run their business, and labor to sell their apps for free to Apple hence increasing the value of the Apple ecosystem at their expense.
- 22. It should also be noted that Apple does purchase apps for non-zero prices, and routinely so. In the above diagram, it is noted the Dark Sky weather prediction app was purchased by Apple at an undisclosed price estimated between \$100million and \$1billion to bring the app to Apple's ecosystem, and exclude it from Android. Apple also finances the development of apps to assist other countries (Chinese government Baidu) and other "partners" it feels deserve its partnership.
- 23. In sum, Apple monopolizes the institutional app markets in the United States, where it competes with small developers. Alternatively, Apple monopolizes access to the smartphone enhanced internet device userbase, which it charges developers \$99 annually for limited userbase access. It accomplishes this by constraining sales on application loading software and notarization stamps, which will be elaborated upon later.

VENUE

24. Venue in the California District is proper under 15 U.S.C. § 22, which states that any suit proceeding under antitrust laws against a corporation may be brought in any district where it transacts business. Apple transacts business in California. Apple's developer agreement assigns venue to CAND, and this case was transferred to this Court at Apple's

- request from the New Hampshire and Maine districts. The forum selection clause is itself subject to Sherman review.
- 25. This Court has subject matter jurisdiction, pursuant to the Class Action Fairness Act of 2005, 28 U.S.C. 1332 (d), because the proposed class of up to thirty million Apple developers exceeds 100 members, the amount in controversy exceeds \$5,000,000, and at least one member of the class of plaintiffs is a citizen of a state different from Defendant Apple, a California corporation. Jurisdiction in this Court for a permanent injunction arises under 28 U.S.C. § 1331, for federal questions presented pursuant to 15 U.S.C. § 26 (Clayton Antitrust Act). Diversity jurisdiction is invoked pursuant to 28 U.S.C. § 1332 because the parties reside in different districts and the amount in controversy exceeds \$75,000.
- 26. The Administrative Procedure Act, 5 U.S.C. § 702, grants jurisdiction to this District Court for matters pertaining to the Federal Trade Commission.

II. PARTIES

27. Plaintiff Coronavirus Reporter is a Wyoming Corporation. Coronavirus Reporter is also the name of the Plaintiff's iOS application, which attempted to use the national internet backbone for the first time in the history of pandemics to allow citizens to self-report and geolocate emerging epidemiological trends. Written in February 2020, it is believed to have been the first-mover in the entire group of "COVID startups" banned by Apple. The company appointed renowned cardiologist Dr. Rob Roberts as Chief Medical Officer. Dr Roberts at all times has had full and final authority over the app, which is his medical scientific work product.

- 28. CALID is a Wyoming corporation founded in 2016 to develop the CALID iOS App. CALID is an abbreviation for CALendar IDentifier. The flexible and highly functional CALID platform allows scheduling of any resource entity – which could range from its focus on telehealth videoconferencing, to a birdwatching tour. Apple denied the CALID app originally because it sought to use direct credit card payments for the rentals, which have a 2% transaction fee. Apple demanded CALID use their IAP system, which has a 30% inefficient transaction fee. CALID was approved after it implemented IAP purchases, and did conduct a modest amount of IAP sales on the App Store. CALID was forced to abandon work on the platform largely in part due to these inefficiencies. CALID paid nearly a decade of \$99 developer fees, to participate in the Apple ecosystem. CALID was subject to ranking suppression, upon information and belief because it a) wasn't written in Swift/Xcode, which Apple uses to lock end-users into the iOS ecosystem, and b) it competed with Apple's own apps and cronies' apps. Despite offering a sophisticated platform for free, that was years ahead of the telehealth 'revolution,' the app was typically invisible on App Store searches.
- 29. Plaintiff Primary Productions LLC, an edutainment media production company, is a New Jersey Limited Liability Corporation. It was formed in 2010. It is the 100% owner of a blockchain giveaway app "Bitcoin Lottery" that was rejected after submission to Apple. Apple used false pretenses to reject the app, alleging it served no reasonable purpose. In fact, the App competed with other giveaway apps of Apple's cronies. It also was not written in Swift.
- 30. Plaintiff Dr Jeffrey D. Isaacs is a Dartmouth-trained medical doctor (M.D) and computer scientist (A.B., *hons*). An Apple enthusiast since 1984, a neighbor introduced him to their

Macintosh 128k and the considerable software collection they had attained quite early on. Said neighbor would go on to be the first Director of Apple's App Store and the inventor of the Apple Arcade. On Christmas Day 1985, Plaintiff got his own Macintosh 512k which commenced his exceptional early achievement in computing. Dr Isaacs wrote his first app in 1993, a Mac program that relayed missed phone calls from his home answering machine to his pager. From 1994-1997, he wrote cross-platform GUI mRNA sequencing applications with Philadelphia-based institutional research groups affiliated with the COVID vaccine discovery. With a perfect score on the Math SAT, Isaacs chose to matriculate at Dartmouth College in part because of their early 1991 partnership with Apple to mandate every student had an internet backbone connected Mac. Dr Isaacs patented web caller-ID in 2014, and his free "Caller-ID" app was an instant Top 10 hit on Apple's App Store charts. Millions of customers downloaded the app, and it saved them costly \$100 subscriptions to Whitepages. By conservative estimates, Dr. Isaacs' invention and Caller-ID app saved the US economy no less than \$100 million in unnecessary subscriptions. When Dr. Isaacs asked Apple to remove copycat Caller-ID apps from the App Store, Apple refused to do so, despite federal law requiring a presumption of validity for his patent. Shortly thereafter, Caller-ID was demoted two hundred spots and lost 98% of installs. An Israeli copycat with plainly inferior functionality, to this day, holds the top spot where Dr. Isaacs' Caller-ID used to be. But Dr. Isaacs moved on, and invented WebCaller, a cross platform videoconferencing app in 2019. Dr. Isaacs saw a need for iOS users to be more easily able to video conference Android and Windows users. Since his days writing cross-platform mRNA apps, Dr. Isaacs' training at major academic computing centers instilled a passionate belief in open computing standards and crossplatform functionality. Facetime's lack of such functionality helped lock users into the iOS monopoly. Apple certainly didn't want an app that competed with their own Facetime competing App. And, WebCaller was not written in Swift, which is another reason it was subject to ranking suppression. Despite being well ahead of the postpandemic videoconferencing explosion, WebCaller received only single-digit downloads. Apple's own FaceTime just added WebCaller's cross-platform web-link functionality this month, and instantly received hundreds of millions of installations due to preferential bundling. Despite being a loyal Apple developer, Apple betrayed Plaintiff when it improperly gave his web caller ID invention to a crony, and shamelessly lifted his WebCaller weblink technology into FaceTime 15. It is particularly concerning that the weblink technology could have been most useful during the pandemic, but was suppressed by Apple for the preceding year. Dr. Isaacs additionally holds an MBA in international studies from Wharton and INSEAD. At University of Pennsylvania's School of Engineering, he was a Benjamin Franklin Scholar. He matriculated at the Vanderbilt Law JD program, where he had been awarded a full scholarship. Dr. Isaacs plans to complete neurosurgery residency, having attained a highly competitive 99/99 on the National Medical Boards. Dr Isaacs' interdisciplinary expertise has been instrumental in formulating the claim theories asserted in this Amended Complaint.

31. Defendant Apple Inc. is a California corporation with its principal place of business in Cupertino. Apple is the largest public company in the world, with a current market capitalization of approximately \$3 trillion. Apple designs, markets, and sells smartphones (the iPhone) and computers (the Mac), which functionally rely upon and profit immensely from access to the taxpayer-funded national internet backbone. Apple owns

and operates the App Store, which serves as the only retail store for iOS applications (apps) that execute commerce and information flow over the national internet. Because the App Store rejects some 40,000 apps per week, it causes millions of person-years of economic losses, and a vastly sub-optimal "network effect" of the Internet. To remedy this, in April 2021 Plaintiffs proposed a compromise whereby Apple creates an independent App Court, the first law enforcement body of its kind devoted solely to computer code and digital asset search rankings. Apple informed Plaintiffs in August 2021 that they would not grant this request to finally implement due process at the App Store. Rather than engage in compromise, Apple began a campaign of ill-will towards Plaintiffs which resulted in at least five news articles being published this year quoting Apple's false statement that this present action was filed with "disregard for the law." Plaintiff, who sought to save lives with its app, and whose medical director has saved countless lives with the MBCK invention, had full regard for the law in bringing this Amended Complaint.

32. Defendant Federal Trade Commission ("FTC") is an agency of the United States government. FTC Headquarters is located at 600 Pennsylvania Avenue NW, Washington, DC, 20580. FTC's mission is "Protecting consumers and competition by preventing anticompetitive, deceptive, and unfair business practices through law enforcement, advocacy, and education without unduly burdening legitimate business activity."

III. <u>FACTUAL HISTORY</u>

33. Introductory paragraphs preceding this paragraph are asserted herein and responsive pleading is hereby noticed as necessary.

- 34. Apple operates the App Store, and has exclusive control over iOS applications and their ability to access that national internet backbone. The national TCP/IP internet backbone was built, at least in part, using taxpayer dollars for ARPANET. Apple has profited immensely from the existence of the national internet backbone. Without the internet, and the taxpayer dollars that built it, Apple would not enjoy the \$3 trillion valuation it has amassed. The Apple smartphone ecosystem is primarily a graphical user interface (GUI) software (iOS) and hardware amalgamation connecting users to the national internet backbone.
- 35. Over the years, Apple has taken a concerning, increasingly authoritarian approach to the App Store and access to the iOS userbase (the owners of the "network effect" of hundreds of millions of interconnected smartphones) and has rejected and/or disallowed significant numbers of third-party applications.

State of Emerging Antitrust Proceedings

- 36. There has been a recent international consensus that Apple engages in anticompetitive conduct to monopolize the App Store marketplace. This is part of an emerging trend of global public interest in regulating "Big Tech." The world rapidly adopted smartphone internet connectivity over the past decade. This has lead to vast sociological implications which we are in the very early stages of fully understanding. There are at least several emerging antitrust proceedings of particular relevance to this case, that combined form an international consensus that the App Store harms competition and innovation. These include:
 - The bipartisan Senate "Open App Markets Act" (*Exhibit* A) introduced last month by Senior Senator Blumenthal. The Act's Section 3(d) on "interoperability" requires the App

Store allow direct app loading and eliminate search ranking self-preference. As such, the Act attempts, through legislation, to obtain the same App Store changes as the preliminary & permanent injunctions requested in this Amended Complaint.

- The "Investigation of Competition in Digital Markets" majority staff report and recommendation by the United States House of Representatives Subcommittee on Antitrust, herein referred to as the "House report." The facts uncovered by the House report applicable to Apple (*Exhibit A*) are hereby wholly incorporated herein. The report concludes that courts have had disregard for the legislative intent of Sherman, and too narrowly construe it in cases involving Big Tech.
- The "Executive Order on Promoting Competition in the American Economy" was signed into law by President Biden on July 9, 2021. In this order, the FTC is specifically tasked to use its statutory rulemaking authority to address "unfair competition in Major internet marketplaces."
- A European Commission investigation into the App Store, launched in June 2020. ("The EC investigation"). Proposed legislation exists in the EU and the UK which would mandate App Store modifications identical to this complaint and the bipartisan US senate bill.
- South Korea just last week indeed passed legislation requiring these same changes that are proposed in the US Senate and EU. Russia fined Apple for App Store anticompetitive behavior.
- A consumer class action antitrust lawsuit filed in 2011 alleging App Store violations of Sherman in the app aftermarket (i.e. Kodak downstream theory). This lawsuit was incorrectly dismissed by a Northern California judge, only to be remanded eight years

later by the Supreme Court. *Pepper v. Apple Inc*, 11-cv-6714-YGR. The *Pepper* complaint and findings of fact relevant to and supporting this case are hereby incorporated herein.

- A developer class action antitrust lawsuit filed in 2019 alleging App store violations of Sherman in the app distribution aftermarket. *Cameron et al v, Apple*, 19-cv-3074-YGR. The *Cameron* class is restricted to app developers who sold apps for non-zero prices. Supporting evidence and facts of the *Cameron* complaint (Docketed by opposing counsel) are incorporated herein. Plaintiffs are opt-out members of this action.
- An app distributor lawsuit for Sherman violations was filed in 2020 in Northern California, *Saurikit (aka Cydia) v. Apple*, 20-cv-8733-YGR. *Cydia* alleges it was the first to implement an app store on the iPhone ecosystem, and has been improperly booted from the market by Apple. *Cydia* seeks injunctive relief to require Apple to allow competing App Stores.
- Likewise, *Epic v. Apple*, 20-cv-5640-YGR seeks such relief to permit the games developer to open competing app games stores. Epic has invested a substantial amount of time and "unlimited time and money" as this District noted discovering anti-competitive tactics Apple has used to lock consumers into iOS. This information is directly relevant to Plaintiffs' more expansive claims. By building upon the findings of Epic & Cravath, Plaintiffs can eliminate duplicate and costly discovery. The approximately eighteen pages of non-IAP, non-Epic specific anticompetitive proposed conclusions of law (i.e. sections on safety, malware, lock-in practices, etc) discovered by Epic are incorporated herein (Exhibit B). Plaintiffs' counsel will convey this shortlist to opposing counsel, if requested.

House Report

- 37. The "Investigation of Competition in Digital Markets" majority staff report and recommendation by the United States House of Representatives Subcommittee on Antitrust provides compelling support and evidence supporting the Plaintiffs and class members claims. The report asserts that Apple's control over iOS provides it with gatekeeper power over software distribution on iOS devices. The report declares Apple has "monopoly power over distribution of software applications on iOS devices." The report quotes Apple executives as stating that Apple is "not subject to any meaningful competitive constraint" in this channel. This results in "supra-normal" profits according to the report.
- 38. Apple makes \$2.7 billion annually simply from charging developers \$99 to access their platform. This fee is more than quadruple the fee of the nearest rival, and has directly harmed Plaintiffs and class members.
- 39. The report explains how eliminating IAP tying could be done by allowing other payment processors like PayPal, VISA, etc. to service the market. This tying has directly harmed a large subgroup of Plaintiffs and class members. Apple has recently proposed modifying IAP tying to allow email invoicing by developers. As Apple is well aware, each "additional step" in app billing algorithms reduces participation by significant amounts. Although the final mechanisms have not been described by Apple, approximately 85% of customers would still be effectively tied in to IAP under Apple's proposal.
- 40. Apple benefits immensely from a ranking system that favors their own rival apps, according to the report. Some searches reveal "14 Apple apps before showing results from rivals." The report documents that Apple "holds [competitor apps] to a different

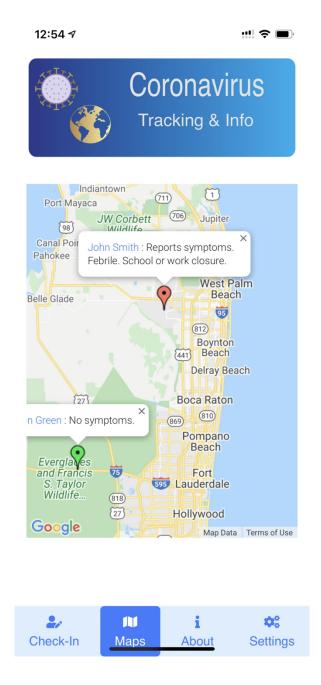
- standard" than its own apps, which is precisely what happened to Plaintiff Coronavirus Reporter, and other class members. Such ranking unfairness has directly harmed Plaintiffs and class members.
- 41. Described is Apple's history of "closely monitoring the success of apps in the App Store, only to copy the most successful." Apple "takes other companies innovative features," which was the case with Coronavirus Reporter and Facetime 15/WebCaller. In sum, Plaintiffs and class members have experienced such anti-competitive behavior as described in the report.
- 42. The House report has an entire section devoted to Apple's "excluding rival apps." A well-cited case is Apple's exclusion of parental control and Screen Time apps. One developer is mentioned who invested almost \$250,000 in a parental control app, only to be told by Apple that this category of apps is disallowed. This pretextual exclusion is directly analogous to Apple's blanked ban of all startups from contributing to the COVID effort. Many class members have suffered the same fate, resulting in thousands of person-years and tens of billions of dollars of damages.
- 43. The report describes how apple has "absolute discretion" in approving apps, resulting in "complete tyranny." Just as Plaintiffs have asserted their heartbreaking experiences being misrepresented to by junior Apple app store reviewers, the House Report goes even further. It says "different reviewers" interpret same apps "differently" with "intentionally...vague" guidelines that consist of "moving goal posts" and "unwritten rules." The report describes the frequent delays of weeks or months (which *Coronavirus Reporter* experienced) as "insufferable."

- 44. The Subcommittee exposed reports that Apple appointed two App Store employees to navigate the waters for Chinese firm Baidu, effectively giving them preferential treatment. Described is the Apple CEO's denial of preferential treatment, followed by seemingly incontrovertible evidence the Subcommittee uncovered. As noted, Coronavirus Reporter and other Plaintiffs never received any form of assistance for their critically important apps.
- 45. The Subcommittee findings re Apple's anti-competitive behavior, approximately ten pages in Exhibit A, are hereby asserted by Plaintiffs and class members as if fully pleaded herein.

Lead Plaintiff – Coronavirus Reporter Facts

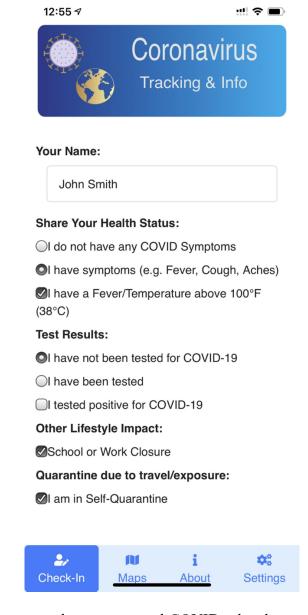
- 46. At the time Plaintiff Coronavirus Reporter submitted their app to the App Store, there were zero coronavirus-specific apps on the United States App Store. A keyword search for COVID or Coronavirus yielded no results.
- 47. Their nimble team allowed them to create the first COVID app by a world renowned researcher, and what would have been the first COVID app on the App Store. The team included NASA's former Lead Cardiologist, as well as a front-line Emergency Room physician and a Dartmouth trained computer scientist who personally developed apps used by half a billion users. Dr Roberts had full and final authority over all functionality of the medical app, as Chief Medical Officer of Coronavirus Reporter. In short, Coronavirus Reporter was developed by a world-class medical team with specific area expertise necessary and appropriate to combine health care epidemiology research with large-scale data operations. This combined expertise would allow this startup COVID app to be first-to-market.

- 48. The Coronavirus Reporter app was developed in February 2020. The app team, and the application they developed, was ready for deployment when COVID was just arriving in the United States. The Coronavirus Reporter app, had it been allowed, would have provided useful bioinformatics data, as it provided a medium for open and free symptom and related information exchange by the general public. Users could submit their own symptoms, lockdown status, vaccination status (in version 2.0), and see reports by their neighbors.
- 49. By offering a trustworthy and direct reporting of primary source data, Coronavirus Reporter would in all likelihood have prevented substantial morbidity and mortality. Expert analysis will be presented at jury trial showing that Apple's refusal of Plaintiff's app caused no less than two-thousand deaths in the United States. Many "Covid deniers" might have concluded differently by monitoring primary source data, as opposed to "vetted" government and institutional data. For this reason, Plaintiffs state this was an historical app, for the first time in the history of pandemics, one could watch primary-source global data, from the convenience of their iPhone.
- 50. The app provided both informal location contact tracing, and pandemic situational awareness. This was implemented using a familiar and intuitive geolocation screen to report symptoms and view nearby outbreaks.



51. Little was known about COVID symptoms at the time, and the app was meant to develop with nimbleness and plasticity as situations emerged. In other words, the same skills Coronavirus Reporter employed to have the first COVID app, would allow for many

future-improved versions that could advance epidemiological study of the pandemic, such as vaccination self-reporting and breakthrough case data collection.



52. The app sought user reported symptoms and COVID related questionnaire items drafted by a front-line ER physician. The public demanded this information that simply wasn't yet available from mainstream medical institutions. In other words, a social media/crowdsourced app provided a useful tool for pandemic situational awareness.



This app allows for community reporting of symptoms related to the novel coronavirus. The map view allows you to quickly see 'hot zones' of fever & symptom outbreaks reported by other app users. Users may also report school/work closures and self-quarantine status. Your profile report submission allows you to share valuable data with other users and epidemiology researchers to better understand this rapidly emerging health concern. This app is designed to provide public transparency of an evolving pandemic that is currently unavailable from other sources. Specifically, the true infection incidence rate of COVID-19 is unknown as many with mild symptoms are not registered by public authorities and hospitals. Additionally, there are shortages in lab test kits globally; Vice President Pence confirmed today that the United States has such a shortage. The COVID-19 Coronavirus appears to have originated in Wuhan, China in late 2019. Official estimates place the number of infections just short of 100,000 individuals and 5000 fatalities as of



53. Apple rejected Coronavirus Reporter on March 6, 2020, knowing apps from large institutions and strategic partners were in the pipeline but not yet ready. Apple specifically strategized to prevent the Coronavirus Reporter app, and *all* COVID startup firms, from setting a precedent or amassing a user base, which could jeopardize its own

- pipeline and/or the first-mover advantage of desirable institutional partners of a monopolistic trust.
- 54. In the weeks following the initial rejection, with knowledge of Coronavirus Reporter's correspondence, Apple broadened the App Store requirements for a COVID app from insurance companies to any healthcare company with deep-rooted credentials. Plaintiff told Apple in no uncertain words that permitting insurance companies, but not other companies, was absurd. Apple seems to have been embarrassed and dropped the insurance company exclusivity clause. But Apple stayed firm on banning small startup companies, favoring large institutions. Apple defined these larger institutions as "deeply credentialed," but ignored the fact that Plaintiff had a deeply-credential medical startup.
- 55. Medical history is plentiful with examples of startups that revolutionized medicine. In his CNBC interview, Dr Roberts cited that "Penicillin was invented by a startup, it was a two person effort. Thankfully Apple wasn't in a position to block the invention of penicillin."
- 56. Despite expanding the App Store guidelines to any healthcare company, Defendant Apple denied the appeal and permanently disallowed the app on March 26, 2020. Apple internal discussions with its own partners, at the time, were already discussing their own proprietary COVID app. Apple was also looking to form partnerships with other leading institutions to develop COVID apps, that would further cement Apple's own monopolistic trust and medial endeavors. Apple's CEO Tim Cook has widely stated that healthcare is a major focus in Apple's strategic growth. On January 9th, 2019, Mr. Cook stated that Apple's "greatest contribution to mankind" will be Apple health care products. Blocking well established medical leaders from contributing to a pandemic raises serious questions within the scope of antitrust law that shall be elucidated in this complaint.

- 57. Apple's twenty-day delay in assessing Dr Roberts' deep credentials suggests they struggled internally with the matter. Ultimately, Apple decided it would rather selectively choose apps that fit its own goals, even if that meant forbidding a world renowned doctor from distributing his scientific work product.
- 58. About one month after rejecting the app, Apple permitted several employees at a London teaching hospital to distribute a COVID app on the App Store that functioned nearly identically to Coronavirus Reporter. That competing app obtained the so-called first mover advantage, and is currently used by five million individuals daily.
- 59. Apple ultimately launched its own Covid app, a competing product to Dr. Roberts app. As of today's filing, some eighteen months after Dr. Roberts' app would have been available to 100% of the world, Apple's app is available to less than half of US citizens. Apple's app is built-in (bundled) with iOS and hence does not show as a typical app. But nonetheless, it is a smartphone application, despite Apple's claims otherwise. It also requires a partnership with a government entity (i.e. any given State of the United States), to activate functionality for an end-user.
- 60. The Apple contact tracing app generally underperformed expectations and failed to obtain a user base in the United States. Nonetheless, research by a Turing/Oxford team into the epidemiological impact of the app suggests the UK version of the app has prevented 600,000 coronavirus cases since it was launched.
- 61. Coronavirus Reporter was ready months before other world-class COVID app products, and would likewise have prevented deaths in the US and other countries where the NHS/Apple app did not succeed. Deaths would have been prevented through both the informal contact tracing geolocation functionality, as well as "situational awareness"

- offered by the app that does not exist in the UK/Apple app. Apple's denial of the Coronavirus Reporter app resulted in unnecessary deaths.
- 62. We assert this is the first time in history a corporation was able to prevent a Professor of Medicine and award winning inventor, who had saved countless lives through his MBCK discovery, from contributing to an emergency pandemic.
- 63. Indeed, Apple did knowingly and willfully prevent the inventor of MBCK from publishing a competing COVID app. Apple knowingly blocked a competing COVID app that covered the entire US population at least 18 months before their own bundled app.
- 64. Defendant Apple knowing and willfully prevented Dr Roberts, inventor of a heart attack test used by millions, from assisting citizens over the internet during the early days of the pandemic, which would have been historical. History lost an important invention, or at the very least, an attempted medical experiment never before attempted in the history of pandemics. Apple knew, or should have known, that curtailing such expert assistance could have caused increased incidence and mortality due to COVID-19.
- 65. Indeed, blocking all startups from assisting with COVID app development likely cost lives. The flagrant Sherman Act violation seriously, dangerously, and recklessly constrained competition here, much needed medical innovation.
- 66. Apple's willful denial of Dr Roberts' medical app, and other startup COVID apps, was directly assented to by key Apple leadership, including Mr. Cook and/or one of his delegates. These leaders willfully blocked an app that would have saved lives, according to their own research in conjunction with Oxford(see below). In doing so, Apple disregarded long-established medical norms to an extent that was breathtaking.

- 67. Apple's App Review Board did not possess anyone with better COVID insight or credentials Coronavirus Reporter's Chief Medical Officer, though Apple acted as if they did have some sort of superior knowledge.
- 68. Said Chief Medical Officer created work-product, the app, that could have benefitted millions. Apple used arbitrary and capricious standards to prevent that benefit from being made reality.
- 69. Defendant Apple stated the reason for denial was that a) Coronavirus Reporter was not a recognized healthcare entity, and b) the "user-generated data wasn't vetted by a reputable source."
- 70. In so doing, Apple was saying that citizens shouldn't be allowed to share their symptoms of COVID, and that Dr. Roberts' app model was inappropriate.
- 71. In so doing, Apple was infringing upon the right of Coronavirus Reporter, as well as ordinary citizens and COVID patients to engage in free, unrestricted commerce and information exchange on the internet.
- 72. Defendant Apple allowed at least two competing COVID apps from large institutions approximately three months after Coronavirus Reporter's app was ready. This caused Coronavirus Reporter to lose the valuable first-mover advantage of an internet app.
- 73. Apple allowed a similar British app from Guy's St Thomas' hospital to enter the App Store. Although it was sponsored by an institution, the app was primarily the work-product of several individuals, as was the Coronavirus Reporter app. This app quickly achieved millions of users a day. Had Coronavirus Reporter been rightfully approved, the app would have received a significant share of the volume that went to competitor apps.

- 74. In a second example of their breathtaking arbitrary standards, Apple did approve a fledgling Florida startup's COVID app. As the House Report determined, often Apple interprets its own guidelines incorrectly or inconsistently. As other app teams have experienced, often cronyism takes place where Apple allows their own friends and app teams known to them to violate their own guidelines, which appears to be what happened in this case of a startup being permitted to launch a COVID app with a Chief Medical Officer that did not possess the qualifications of Dr Roberts. That startup did not have a large-scale big-data computer scientist from Dartmouth, as did Coronavirus Reporter, which had written apps that served hundreds of millions users.
- 75. Allowing the aforementioned competing apps, but disallowing Coronavirus Reporter, and most all other COVID startups was intentional, flagrant restraint of trade. Apple effectively controls internet access to more than half of the United States population.
- 76. By disallowing Coronavirus Reporter and partnering with a rival to provide a COVID app that ultimately failed its objectives, Defendant Apple's monopolistic practices caused a permanent loss of valuable epidemiological bioinformatics data. This loss extends to eighteen months, and is void of any data during the three months when no competing apps existed in the US marketplace. Valuable epidemiological data was forever lost during that duration.
- 77. Native apps are favored by customers by almost 90% over web browser apps. Native apps provide more functionality, some of which is critical with a Covid app. As such, "smartphone enhanced internet commerce and information flow" requires access to the app SDK, rather than mere web browser experience, because GPS, altimeters, and other devices cannot be reasonably accessed without native app permission. Apple's competing

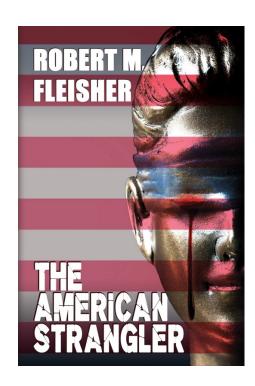
- Covid app uses native app functionality, and Dr Roberts would have been severely disadvantaged to rely on a web browser with limited-to-none SDK access.
- 78. As such, Apple exercises a *de facto* monopoly of access to the national internet backbone, or at least, the smartphone enhanced functional internet backbone and iOS userbase. The collective network of hundreds of millions of smartphone devices including their sophisticated sensors is simply not Apple's property. It is the property of the users, the general public, and should exist as a "common carrier" free from Apple's control.
- 79. There exists tens of millions of individuals in the United States who do not know how to access the internet without using an iOS device. These individuals rely upon access to the internet to perform critical commerce activity, engage in protected free speech, and obtain lifesaving medical advice and treatments.
- 80. Coronavirus Reporter has ongoing ideas for its product, such as vaccination data, that of course were not possible in their version 1.0 product for February 2020 release. Ongoing harm to the company and the general public is caused by Apple's refusal to allow the team to publish their work.
- 81. There was no reasonable grounds for Apple to deny the Coronavirus Reporter app, and all other COVID startups for public distribution. This represented damage to an entire market of COVID startups not directed damage to one company.
- 82. Dr Roberts was interviewed by CNBC on January 28th, 2021 about Apple's refusal to publish his Coronavirus Reporter. His statements in that interview are asserted as true to the best of his knowledge and belief. In summary, he stated:
 - 1. The app was designed to be a large-scale, supervised epidemiological study, the first of its kind in such an historic pandemic.

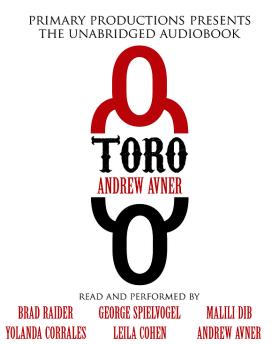
- 2. He invented the MBCK gold standard screening test for heart attacks, used for over three decades. Thus he had particular experience to supervise such an immense screening effort.
- 3. He was "taken aback," in his own words, when Apple announced they were refusing his app for lack of deep-rooted medical credentials.
- 4. Dr Roberts discovered numerous heart attack genes, was CEO of a major Heart Institute, personally signed off on John Glenn's space flight, authored medical textbooks, and directed the Nobel prize committee for mathematics. In his words, if Apple said he lacked "deep rooted" credentials for a COVID app, who was safe from Apple?
- 5. To the extent Apple attempts to portray a startup as distinct from his own credentials, Roberts dismissed that with a historical perspective. Penicillin was invented by a "startup" with deep-rooted medical credentials, as were many of the most important inventions since the Industrial Revolution. In short, for Apple to claim an institution has some unique ability to contribute to medical science, that an individual startup lacks, is not historically accurate.
- 6. Roberts asserted that society lost from Apple's refusal, in that critical epidemiological data was forever lost.
- 7. Roberts brainstormed that the app might have helped him elucidate long term cardiac complications of COVID.
- 8. Roberts stated that, though he is not a lawyer, he doesn't feel Apple should be allowed to do what they did.

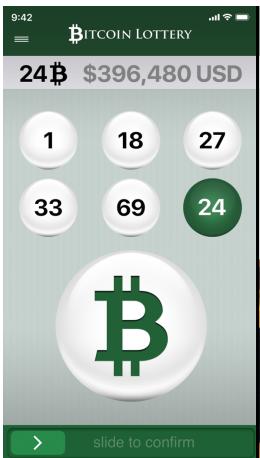
Lead Plaintiff – Primary Productions Facts

83. Primary Productions is a diversified media production company. Its holdings include the retro rock band "Halcyon", the children's novel "TORO", the legal thriller "American Strangler", and the "Bitcoin Lottery" iOS App.











- 85. Plaintiff's blockchain app completed development in mid-2018. Primary Productions developed the business model for the app over a seven-year period. The app sought to educate the public about blockchain wallets by distributing hundreds of millions of dollars of free digital encryption currency, aka cryptocurrency.
- 86. Apple generally blocked blockchain apps, including blocking "mining" activity, and even environmentally friendly "staking" activity, purporting it was harmful to the iPhone. Mac users, however, could mine bitcoin, and no widespread harm is known to have happened to Mac computers from mining or staking.
- 87. Apple proffered a stream of pretextual reasons to deny Plaintiff's app, even arguing it was "frivolous" and "caused risk-gambling," when neither were the case; in fact, Apple Arcade had numerous "frivolous" apps that were deeply unpopular with users, necessitating their prompt removal from the arcade. Of the two million apps on the app store, Bitcoin Lottery certainly ranked near the top in potential interest and purpose. In other words, there were many approved apps that were less meaningful, or employed shameless "clickbaiting."
- 88. Plaintiff's development team was based in the Ukraine, under contract and direction from Primary Productions. All programmers of Plaintiff's app were located in Lviv, Ukraine for the entire duration of the project.
- 89. In so restricting competition, Apple was also saying that citizens shouldn't be allowed enjoy the full benefit of their hardware purchases. Consumers couldn't engage in blockchain uses, novelty games related to blockchain, and were presented with limited marketplaces Apple Arcade, for example vastly limiting consumer choice. In short,

- Apple curtailed the freedoms of consumers who paid for their hardware and developers, like Plaintiff, who sought to provide novel functionality.
- 90. In so doing, Apple was infringing upon the rights of Plaintiff, all class members, as well as ordinary citizens to engage in free, unrestricted commerce and information exchange on the internet. Apple harmed competition by blocking this well designed Bitcoin Lottery App. Furthermore, version 2.0 of Bitcoin Lottery had particularly engaging and additional features, but these features cannot be built until a version 1.0 develops a critical mass. As such, Apple rejects potential features under the pretense that they are "not fully implemented," when in fact, it is an impossibility to implement. In other words, Bitcoin Lottery was just starting as a fledgling app, and Apple's policies kill the idea before it can even fully develop.
- 91. Defendant Apple allowed at least two competing apps to engage in the "click-attracting sweepstakes" behavior Apple accused Plaintiff of partaking. This caused Plaintiff to lose the valuable first-mover advantage of its blockchain giveaway app.
- 92. Allowing the aforementioned competing apps, including Apple's Arcade and HiQ, but disallowing Bitcoin Lottery was an intentional, flagrant restraint of trade.
- 93. By disallowing Plaintiff's app, Defendant Apple's monopolistic practices caused a permanent loss of educational experience for potential blockchain currency newcomers.

Lead Plaintiff – CALID Inc Facts

94. CALID was launched as a cross-platform scheduling platform with an initial focus on telehealth. It was four years ahead of its time, as the telehealth industry took off just in the past year as a result of the pandemic.

- 95. Apple initially rejected the CALID app, claiming it didn't provide any "smartphone enhanced" experience, i.e., no "added functionality" in comparison to a basic website.

 They also rejected the app because it didn't use IAP purchases.
- 96. CALID offered iOS users WebRTC videoconferencing on top of a flexible scheduling platform. This was not available on Safari at the time. This itself evidences Apple's desire to 'lock in' users to the iOS ecosystem and restrict access to the Google-developed WebRTC platform.



ABOUT CALID

CALID.com is an online marketplace platform that allows people to meet online, learn about each other's offerings, and subsequently book appointments directly with one another. Members who join CALID.com are able to host listings, to sign up for and schedule appointments, or both. A listing on our site is also referred to as a CALID, aka Calendar Identifier. You can think of a CALID as a social media page, but in addition to traditional social media pages which have photos and text, a CALID page also allows scheduling. Members may have as many CALID listings as they have skills to offer or things to rent. A CALID listing can exist for practically anything that can be scheduled -- including services (eg lessons, outdoor activities, expert consultations) and rentals (eg cars, houses, computers, equipments).



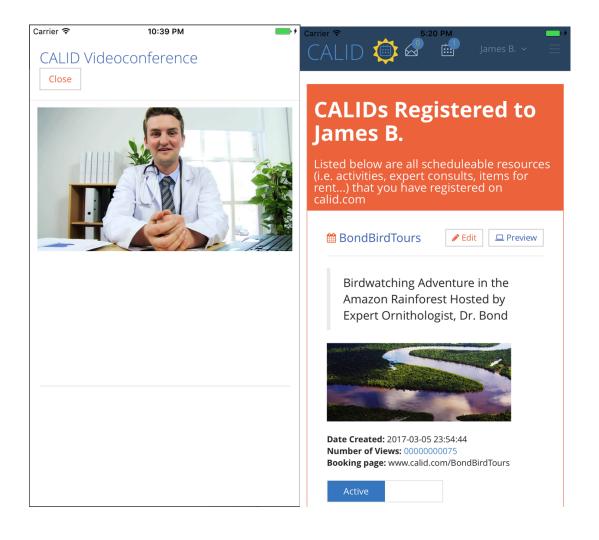
Explore a world of CALIDs

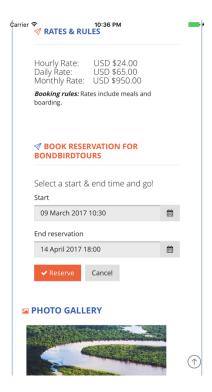
Discover activities and cultural excursions in your hometown - or across the globe. CALID's scheduling system works seamlessly between time zones, allowing for powerful yet easy-to-use global scheduling. CALID's listings marketplace is as diverse as its user base. Join today and contribute to our unique social platform.



Foster eco-efficiency

CALID was founded with a vision of fostering ecological sustainability. Our Founders believed that creating a system that encouraged *sharing* would translate to reduction in unnecessary resource use. The greater the participation in CALID, the better the economies of sharing and resource savings. Videoconferencing is available as an option on any CALID reservation, further reducing unnecessary travel. We depend on members like you to create thoughtful listings to further these goals.





- 97. Apple agreed that CALID offered something beyond a basic website, and approved CALID for distribution once IAP was added. This resulted in users having a 40% commission loss (30% to Apple, and 10% to CALID). CALID abandoned the platform, as it felt the 40% friction made it unethical and untenable to most practitioners.
- 98. CALID had deep medical credentials, and notified Apple of these credentials when it submitted "Coronavirus Reporter" on behalf of Dr. Roberts' team, which had not had time to incorporate their own business entity. As such, under a "force majeure" pandemic situation, CALID offered assistance to Coronavirus Reporter to bring their app to the public, temporarily under their business name.
- 99. CALID had managed FactMed, a website focused on FDA side effects, since 2016.

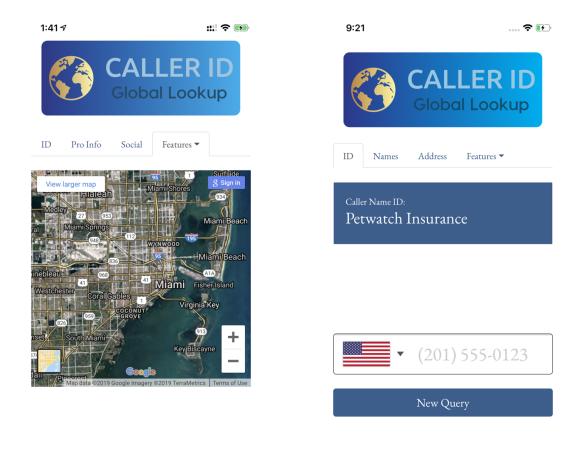
 FactMed had tens of millions of users, and 80 million FDA side effect profile reports.

 Generating these FDA data summaries required lengthy computational work by high

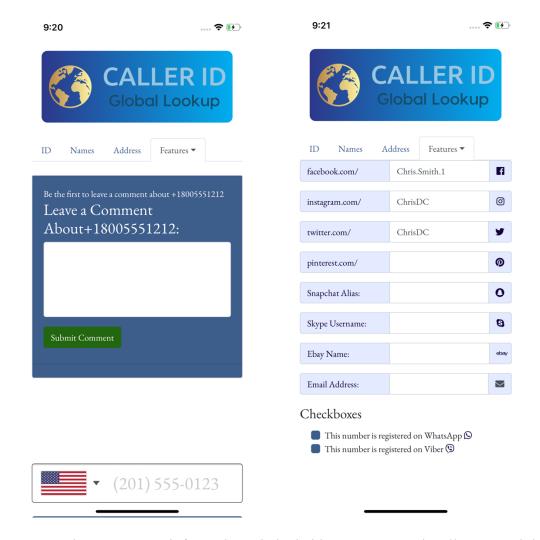
- powered servers. In short, FactMed was "big data" and "big medical data," and offered invaluable access and summary to complex FDA side effect profiles.
- 100. CALID's co-founder was a member of Columbia Presbyterian Hospital's Patient Safety and Quality Committee for a decade. He also founded a Y Combinator backed app, a noteworthy distinction in the world of app development.
- 101. Dr. Roberts, by temporary measures described above, served as Chief Medical Officer of CALID, pending incorporation of Coronavirus Reporter.
- 102. Two additional physicians participated in this project, a front-line ER doctor and an aspiring neurosurgeon and as such, CALID had deep rooted medical credentials covering Big Data, Patient Safety, Telehealth innovation, and of course, Dr. Roberts' notable global contribution to cardiac health.

Plaintiff – Jeffrey D. Isaacs Facts

When Dr. Isaacs wrote his first Caller-ID app for Macintosh, Apple was on the verge of bankruptcy, having sent Steve Jobs to work at another company. Years later, Dr. Isaacs wrote Caller-ID for iOS. It was an instant hit and quickly reached the Top 10. It had, notably, been rejected by Apple on first submission for being a frivolous "overly simplistic" app, despite the fact it would go on to save the US economy at least \$100 million. Apple frequently "gets it wrong" when it evaluates apps; sometimes this is accidental, sometimes it is not. Pictured below are current screenshots of Caller-ID Global Lookup:



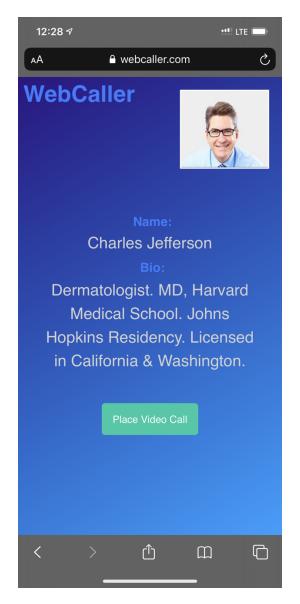
▼ (201) 555-0123



- When Dr. Isaacs informed Apple he held a patent on web caller ID, and that their crony, Whitepages (a top App Store IAP gross producer) violated his patent, Apple took strong measures to curtail Dr. Isaacs' iOS projects. They demoted his app to spot #200 (losing 98% of revenue) and replaced him with another crony with a copycat interface, Orave. They issued false wire transmissions to Dr Isaacs with pretextual reasons to block his app for a period of approximately one-year (see below).
- 105. Dr. Isaacs then developed WebCaller, a cross-platform videoconferencing utility.

 Unique to WebCaller, it provided "weblinks" to WebRTC sessions. This meant anyone could join a videoconference on any platform with no special add-ons or software.

This was a couple years before the "zoom" revolution of the pandemic. In fact, Zoom still requires special software, and competing projects by Microsoft, Amazon, and Google use WebRTC weblinks almost exactly as specified by Dr. Isaacs, with final products that look very familiar to WebCaller, which preceded them by several years.





106. But Apple had suppressed WebCaller for two years, and it only attained a handful of downloads despite being one of the first cross-platform, easy to use WebRTC interfaces. The industry grew by tens of billions of dollars over those years, and Apple

just last month introduced FaceTime 15 – with the same exact weblink features Dr Isaacs perfected years earlier.

- 107. Apple suppressed WebCaller because it competed with Facetime, because it wasn't written in Swift, because it's cross platform emphasis negated iOS "lock in" techniques, and because they knew Dr. Isaacs held the web caller ID patent. Specifically, they retaliated against Isaacs' email stating "Apple threw us under the bus" with regards to the patent. In short, if you are ranked in the Top 10 on the App Store, never, ever criticize Apple even if you hold a patent being wholesale copied by a novice programmer in Israel.
- 108. Apple's above conduct caused significant damages to Dr. Isaacs, to be presented at trial.

A Compelling Pattern of Technical Pretenses

- that caused loss of substantial years of their work. Their five apps were blocked or rank suppressed, causing them each to lose valuable income. Moreover, the competition in their industry the App Market caused similar losses to the smartphone user and the economy as a whole. In each case that has been brought against Apple so far, such as Epic and Spotify, Apple mounts a defense blaming the victim using complex technical arguments as 'smoke and mirror' pretense to justify their anticompetitive behavior. It is hoped here, with five different apps in diverse sectors, Apple's smoke will diffuse. An incontrovertible pattern exists that cannot be denied.
- 110. It is rather striking that over the last decade we, as a society, let Apple take away these rights for us to choose what sorts of programs we could run on computers (i.e.

smartphones) that we paid for. This is analogous to purchasing a TV and only being allowed to watch films approved by that TV manufacturer. Or buying a car and being told by the car manufacturer what neighborhoods it can be driven to. We trusted Apple because we trusted the genius of Steve Jobs and Wozniak. Enthralled by the great advancement of the "smartphone enhanced Internet," we assumed dedication to technological progress and American freedom were inherent goals of Apple. Unfortunately, Apple today has become the single greatest threat to free enterprise and technological progress. Lives were lost by the now eighteen-month delay in rolling out critically needed COVID-19 software. This is the right time and place to end Apple's practices, like over thirty other countries have done or are prepared to do.

- Apple possesses vast userbase studies. Consumer willingness to pay and ability to switch platform studies exist at Apple, Inc. Included in these studies, are evidence of the barriers and difficulties their users would face in accessing the internet without their Apple device. For example, a user who purchased a \$1000 iPhone on a financing plan may not have the financial means to access the internet with an alternate device. Apple has substantial investments in cost-analysis literally tracking every penny its users does and can spend. From these vast economic studies, Apple knows it holds monopoly like power over many users' ability to exit the Apple ecosystem and access the internet through other means. Epic's findings of facts thoroughly document these economic lockin effects, which are equally applicable to our claim theories. Apple's lock-in conduct publicly disclosed by Cravath are incorporated herein.
- Plaintiffs are startups that have no income stream, because of Defendant's illegal actions. Apple, on the other hand, is the world's largest corporate entity. To assist in the

enforcement of the Sherman Act, we have requested help from the United States Attorney for the prosecution of Apple's anticompetitive behavior. Likewise, Plaintiffs are in the process of initiating European Commission complaints that may interact with this case progression.

- In June 2020 Apple publicized that, in light of complaints from developers of unfair rules, they would be allowing developers to challenge the App Store rules. Previously, Apple said developers could only challenge the factual findings of an app review, within the rules guidelines. But in fact, Apple had allowed Plaintiff Coronavirus Reporter to challenge the rules as it did in March 2020. Nonetheless, the rules change did not benefit the company, as Apple still found an arbitrary and/or capricious interpretation of the new rules.
- In short, Apple's "self-policing" of its monopolistic Developer Agreement is a sham. It is part of what Kif Leswing at CNBC refers to as "one rule at a time," although his perspective seems intended to reassure Apple stock holders that their stock price is safe from the repercussions antitrust law enforcement: https://www.cnbc.com/2021/09/05/history-of-apple-giving-ground-on-app-store-rules.html. It had no tangible, real impact on Apple's stronghold of the App Store and free and open internet access. See https://www.cnbc.com/2020/06/22/apple-will-provide-a-way-for-app-makers-to-challenge-app-store-rules.html
- 115. All of the aforementioned examples restricted output, quality, and innovation in the downstream App market for smartphone users. We expect many more stories to emerge as Plaintiffs' first discovery request to Defendant Apple will be a list of every rejected app team and supporting documentation.

- 116. When the App Review Board denies an app, they assign this to a junior staff member who must make the unpleasant call to a developer team to inform them that their team's work of months or years is being denied access to the global internet backbone.
- 117. These are often difficult conversations that understandably cause distress for both parties. Upon information and belief, Apple's junior App Review Board employees (who are only known to the developers on an informal first name basis) suffer considerable psychological distress from repeatedly shooting down the dreams, and years of work-product of the app developers.
- 118. In short, junior App Store employees do Apple's "dirty work" of unreasonably disallowing perfectly legal and legitimate apps that meet all standards and requirements.
- The apps are, in fact, disallowed to foster Apple's monopolistic goals, rather than to protect the public from low-quality or illegal applications. Upon information and belief, Apple routinely employs cronyism when it allows one developer's app, but disallows similar apps from other developers. This is particularly evident and distressing to the aforementioned junior App Reviewers, who are aware they are misleading and/or lying to the other developers.
- 120. Historically, most internet applications were free and open-sourced, under the MIT/GNU software licensing paradigm. In the past decade, Defendant Apple has drastically changed the free, open internet to one of massive, trust-like corporate profits and control.

Claim Theory

121. There is a relevant national market of apps for smartphone enhanced internet access devices, which are critical to the flow of information and commerce. By dollar

volume, Apple's App Store retails approximately 80% of the apps in the US consumer-facing market for smartphone apps. The other side of this market is the national institutional app market, which is a relevant market pursuant to Sherman Act. Apple is a monopsony buyer of developers' apps, in the institutional app market, because they are sole distributer on the retail side. Notably, this institutional market includes apps that are ultimately retailed as free to the end-user. Like a movie studio or streaming service, the distributor purchases content to increase the goodwill and value of their platform, here, the iOS device. Hence developers work day-and-night to build free apps, which have a definite value to Apple and to the economy.

- 122. Once a developer has written an iOS app, it must accept the price Apple pays for it. There is no reasonable alternative. The developer could forego the entire Apple portion of the marketplace, which amounts to foregoing 60% of users and 80% of app sales by dollar volume. iOS apps are written in Swift/Xcode, and selling to any other buyer on this market would likely require rewriting the app from scratch. A compiled iOS app is incompatible with other smartphone devices, hence, no other smartphone app retailer would purchase an iOS app, without requiring the expensive process of rewriting it. In short, there are vast barriers in terms of price elasticity for a developer looking to sell their app to an institutional Apple App Store buyer alternative. Hence Apple's power of this market is not constrained by any nearby competitor, if one exists.
- 123. Because of Apple's anticompetitive behavior, consumer choice is vastly constricted by the monopsony purchasing bottleneck. Not only are prices increased, but selection and quality of free apps suffers dramatically. Since the smartphone app market is a two-sided market, both consumers and developers are penalized by Apple's practices.

- 124. Alternatively, the above defined smartphone market may be narrowed to only iOS internet access devices, i.e. the Apple iPad and Apple iPhone. This single-product market is 60% to 80% the size of the overall smartphone market described above. The iOS market is nonetheless an essential facility to developers seeking to play a role in the "network effect" of iPhone users throughout the country. For example, in the case of Coronavirus Reporter, it would be impossible to offer a comprehensive pandemic epidemiological study app without access to the iOS market. As such, the iOS smartphone internet access device market is a relevant market under Sherman.
- 125. Likewise, the iOS Institutional App marketplace is a relevant market under Sherman. Analogous to the Institutional App Marketplace described above, the iOS Institutional App marketplace is downstream, in this case, from the single-product iOS device market. It is also part of a two-sided market, opposite the retail side, aka the App Store.
- App marketplace. There are no competing App Stores, unlike other platforms, and hence no competing institutional app buyers. There is no way for a developer to directly sell an app to a customer, like other platforms. In other words, users cannot sideload or directly install programs on the iPhone, unlike nearly every other computing platform in history. Put differently, a developer like Coronavirus Reporter could not put up a mini-store on their website to directly sell their app. With few exceptions of jailbreaking (which the Supreme Court required Apple not to interfere with) and corporate exceptions, there are no other distribution or installation points to bypass this market.

- 127. As such, Apple has complete control of pricing and contractual terms in this market. They can reject apps simply because the app competes with Apple's own competitor app, or its cronies. Because users are already locked-in to the iOS device, there is no reasonable substitute institutional buyer or retailer, for either a developer or an end-user, respectively.
- The relevant geographic market is the United States. The United States is a relevant geographic market for iOS Institutional App transactions. The apps, prices, and rules for software purchases vary on a country-by-country basis. For example, encryption software is highly regulated for export. Nonetheless, most antitrust claims asserted in this Amended Complaint would apply to many overseas markets, perhaps with the exception of China. Likewise, US developers frequently sell their apps to international end-users, so damages to US developers go well beyond the US iOS Institutional App marketplace. Plaintiffs' reserve the right to address those damages upon completion of discovery.
- 129. Apple has clear monopoly power in both the national institutional app market, and the alternative, iOS Institutional App market. The monopoly power is in fact in the form of a monopsony, which is simply a "buyer's monopoly."
- 130. Apple has imposed technical barriers to maintain this monopoly, in stark violation of Sherman Act antitrust law. Specifically, Apple blocks direct installation of apps, aka sideloading, or what Plaintiff's refer to as removal of direct loading via a Finder-like application loader. Apple rejects nearly 40,000 apps per week from the App Store using unfair contracts of adhesions, enforced using arbitrary and capricious standards.
- 131. This Amended Complaint focuses on the institutional app market and how it harms developers of free apps. Apps developers generally sell apps under a free,

freemium, or paid model. Typically as an app developer grows, they will expand beyond their initial business plans. For example, a free app developer will offer freemium plans, or a paid app developer may offer a free version with less functionality. Plaintiffs in this case had free, freemium, and paid apps.

- Cameron class action opt-outs. These plaintiffs state the Cameron causes of action in this lawsuit, as opt-outs. For the sake of brevity, those causes of action derive from and reference the Cameron complaint. In the interest of judicial economy, and because Judge Gonzalez-Rogers already determined these cases are not similar, we will not repeat the Cameron claim theories and supporting facts herein.
- 133. That notwithstanding, *Cameron* disclosed spending over \$30million in legal fees to conduct discovery of Apple's App Store, and this evidence (if it becomes available) almost certainly has considerable overlap with our free app claims. Similarly, Judge Gonzalez-Rogers remarked that *Epic* has spent "unlimited money" on discovery of Apple antitrust violations. Rather than reinvent the wheel, and rather than waste tens of millions of dollars of research into Apple's monopoly, we attach Epic's findings of facts as Exhibit B.
- 134. As part of Plaintiffs' claim theory, three additional downstream marketplaces are relevant to the Sherman Act causes of action.
- 135. The first is the market for iOS app notarization (digital signature) stamps. The citizens of our country have invested around a trillion dollars in the iOS "network effect" which forms an essential part of daily life and commerce. Vast functionality in this network effect is possible, given its inherent, combined computing power and

communications. Unfortunately, the executor of these network computations and communications – the app – is subject to an availability bottleneck. Apple must issue a "notarization" or digital encryption signature, in order for an app to launch and access this network. Apple is the sole producer of these notarization stamps. A citizen trying to use an app made by a developer is unable to do so without a notarization stamp from Apple. Apple issues these stamps to developers and ultimately end-users using the App Store Connect developer portal, which has a \$99 annual fee to each developer. Additionally, Apple requires the developer to sign a contract of adhesion – the DPLA – granting Apple purported full discretion as to whether or not to issue the stamps. The market for iOS app notarization stamps is a relevant antitrust market, and for the purposes of this Amended Complaint, the United States is an appropriate geographic range.

- 136. The second market, particularly relevant to the twenty million putative class members who pay \$99 fees to Apple, is for iOS app onboarding software, aka "application loaders." Like the iOS app notarization stamp, the iOS app onboarding software is a critical component to access the critical infrastructure that is the national iOS "network effect." Apple is the sole producer of iOS features and SDK (software development kit) tools, which include app onboarding/sideloading/direct install.
- 137. In iOS, app onboarding can only take place through App Store purchases. By contrast, on the Mac any user can insert a storage device and onboard an app using the "Finder." Likewise they can download an app on a browser into their storage device, then launch it on the "Finder." This has worked very well for MacOS since its inception. The Mac is a safe platform. To Apple's credit, the Mac has always been relatively free of

malware compared to other platforms. Indeed, it is generally accepted that Mac has superior software engineering which makes it safer than rivals. There is no reason why such superior engineering could not be brought to iOS with sideloading. Similar tools exist on nearly every other major computing platform, from Linux to Android to Windows. But on iOS, sideloading/application loading-onboarding is disabled except for the App Store, with few exceptions. Corporate and enterprise customers, who don't tolerate 'dumbing down' of their expensive iOS networks, demand onboarding software, which Apple sells them for \$299 annually. In fact, iOS was derived from MacOS, and much work had to be done to subvert Finder-like functionality and hide it from end-users.

- Apple issues app onboarding software 'bypass usage' to developers, when it grants approval in the App Store. As mentioned above, this costs \$99/year to request such onboarding proxy rights, and Apple often denies onboarding when it rejects 40,000 apps weekly. Put differently, Apple doesn't sell onboarding software to developers or end users, except for enterprise customers. It rents or leases application loader functionality on a per-app basis. The market for iOS app onboarding software is a relevant antitrust market, and for the purposes of this Amended Complaint, the United States is an appropriate geographic range. The market is extremely bottlenecked, as Apple only sells this software to corporate enterprise customers, or leases it for limited use by customers.
- 139. Both iOS Notarization Stamps and iOS Onboarding Software may be thought of as a 'taxicab medallion' the classic 'monopoly for sale' cited in economic textbooks.

 But here, the US government did not grant as far as Plaintiffs are aware—such a 'medallion' monopoly to Apple.

- 140. The third market is that for access rights to the smartphone enhanced internet userbase. Apple likewise charges developers \$99 for these (partial, selectively limited) access rights. The nearest competitor charges \$29 annually for rights, and offers a free bypass sideloading way for developers to reach their audience. This itself is indicative of anticompetitive restraint in the market, as pointed out by the Subcommittee. There is simply no way for a developer to access the smartphone enhanced iOS userbase (including their GPS, and all other low-level SDK calls, unavailable on a simple browser, which itself is strongly disfavored by users). A developer who foregoes Apple misses out on half the market and 80% of 'app spending' capability. Dr. Roberts' app wouldn't have been scientifically valid, if it only accessed half the country's smartphone users. Other Plaintiffs would not, and did not, achieve critical mass for app success.
- 141. Apple possess monopoly power in the market for access rights to smartphone enhanced internet userbase, because of their 50-80% dominance. Customers in this market are the developer, like Plaintiffs.
- In U.S. market, consumers own nearly 200 million iPhones. All of those devices run only iOS applications. Consumers have a strong demand for apps, and a strong demand for notary stamps and software loaders. The App Store is a software loader that is effectively rented on a case-by-case basis. Apple achieves payment for notary stamps from both developers, who pay IAP commissions and annual fees, and consumers, who purchase paid apps which subsidize the process.
- 143. High switching costs prevent users from switching from one operating system to another operating system after they initially purchase a mobile device. These switching costs increase over time for a variety of reasons, including, among other things, the cost

of the mobile device; the user's familiarity with the operating system and unwillingness to learn a different operating system; the user's familiarity with apps on that operating system; the users' costs sunk into purchased applications that are not compatible with other operating systems, which is amplified by the restrictions on the App Store and the inability of App Store developers to communicate freely with their users; and the costs of hardware purchased to support the mobile devices utilizing that operating system. Moreover, switching costs for mobile devices—particularly for iOS devices, due to Apple's typically extreme practices—have increased dramatically in recent years with the advent of cloud computing. These practices are detailed in Epic discovery, which is hereby referenced for incorporation.

- 144. These high switching costs, which are not readily apparent to the vast majority of iPhone users before they purchase their devices, were nevertheless apparent to Apple early on. This led it to realize that it could make enormous additional profits if it exerted complete control over the various aftermarkets into which iPhone users were locked once they purchased their device. These "aftermarkets" include the institutional markets, notary stamp market, userbase access market, and app onboarding markets. None of these markets have been a focus, much less defined, in prior Apple litigation, to the best knowledge of Plaintiffs.
- 145. Smartphone enhancements currently include altimeters, barometers, gyroscopes, cameras, fingerprint sensors, GPS, microphones, EKG readers, pulse oximeters, and even potentially blood sugar monitors. Consumers essentially purchase a bundle of sensors from Apple, with an operating system (iOS) that creates an intuitive interface that connects these sensors to the national internet backbone. Consumers have an expectation,

and a right, to benefit from the network effects (i.e. critical mass and/or economy-of-scales) of interacting with fellow smartphone users throughout the country. Such interaction is not possible through a web browser alone. These sensors require sophisticated API and SDKs not accessible though bare-bones TCP/IP internet protocols. In other words, Apple's iOS is the toolkit that allows consumers to derive full benefit from the hardware they paid for. And Apple sells access to these users via the DPLA.

- 146. In the larger institutional app markets, Apple uses its monopsony power as the sole retailer-distributor for iOS apps and IAP to pay iOS developers below the price they would obtain in a competitive market for their products.
- Plaintiffs were damaged through lost opportunities to get paid for their work.

 Plaintiffs created apps of substantial value, but were paid a price of zero by Apple in the cases of disallowance or ranking suppression. As a monopsonist, Apple had full say in setting this zero price, which stifled innovation and excluded rivals. In the case of Coronavirus Reporter, either monopoly or monopsony theory applies in that prices were artificially manipulated by Apple, Apple benefitted through their own apps, and the consumer lost. For example, Coronavirus Reporter may have offered a free app, sponsored through partnership with Pfizer or Moderna for vaccine information. For users who wanted a truly independent app only representing Dr. Roberts medical expertise, a minimally priced paid app would have been reasonably offered. Intangible benefits to app publishers include brand goodwill, partnerships (e.g. vaccine producers, physician networks), and advertising assignments. Apple's own apps benefit from these, especially brand goodwill. As a monopsonist buyer, when Apple blocked an app like Coronavirus Reporter, it effectively paid the developer zero, reaping the brand goodwill and finite ad

revenue for its own rival apps. As a monopolist distributer, Apple held an excessive IAP rent, charged developers \$99 unnecessarily, and excluded competition – here, all startup COVID apps. These are illustrative examples only, but suggest likely and common scenarios that applied to all Plaintiffs and class members.

Putative Class Definitions

- 148. Plaintiffs bring this proposed class action pursuant to Fed. R. Civ. P. 23(b)(1), (2), and (3).
- 149. Plaintiffs bring this action on behalf of themselves and the following nationwide class, for monetary and injunctive relief based on violations of the Sherman Act:
 - All U.S. iOS developers of any app that was excluded through disallowance and/or ranking suppression on the App Store.
- 150. Not included in this proposed class is the defendant; defendant's affiliates and subsidiaries; defendant's current or former employees, officers, directors, agents, and representatives; and the district judge or magistrate judge to whom this case is assigned, as well as those judges' immediate family members.
- 151. Plaintiffs also bring this action on behalf of themselves and the following nationwide class, for monetary and injunctive relief based on violations of the Sherman Act:
 - Any iOS developer who paid a \$99 annual subscription fees to Apple for access to the iOS userbase and/or app "notarization."
- 152. Not included in this proposed class is the defendant; defendant's affiliates and subsidiaries; defendant's current or former employees, officers, directors, agents, and

representatives; and the district judge or magistrate judge to whom this case is assigned, as well as those judges' immediate family members.

- 153. **Numerosity:** The exact number of the members of the proposed classes is unknown and is not available to the plaintiffs at this time, but upon information and belief, supported by Apple's past statements, the classes will consist of approximately twenty million iOS developers, and therefore individual joinder in this case is impracticable.
- 154. Commonality: Numerous questions of law and fact are common to the claims of the plaintiffs and members of the proposed classes. These include, but are not limited to: a. Whether there is a U.S. market for iOS device app institutional wholesale; whether there is a wholesale U.S. market for smartphone apps; c. whether there is a U.S. market for iOS notary stamps and/or application loading/software onboarding tools, d) Whether Apple has unlawfully monopolized, or attempted to monopolize, the above markets, including by way of the contractual terms, policies, practices, mandates, and restraints described herein; d. Whether competition in these markets has been restrained and harmed by Apple's monopolization, or attempted monopolization, of each market; e. Alternatively, whether Apple has behaved as a monopsonist, or attempted monopsonist, in the wholesale app markets; f. Whether plaintiffs and members of the proposed classes are entitled to declaratory or injunctive relief to halt Apple's unlawful practices, and to their attorney fees, costs, and expenses; g. Whether plaintiffs and members of the proposed classes are otherwise entitled to any damages, including treble damages, or restitution, and to their attorney fees, costs, and expenses related to any recovery of such monetary relief; and h. Whether plaintiffs and members of the proposed classes are

- entitled to any damages, including treble damages, or restitution incidental to the declaratory or injunctive relief they seek, and to their attorney fees, costs, and expenses related to any recovery of such monetary relief.
- 155. **Typicality:** Plaintiffs' claims are typical of the claims of the members of the proposed classes. The factual and legal bases of Apple's liability are the same and resulted in injury to plaintiffs and all of the other members of the proposed classes.
- 156. Adequate representation: Plaintiffs will represent and protect the interests of the proposed classes both fairly and adequately. They have retained counsel able to engage, and experienced with, complex litigation. Plaintiffs have no interests that are antagonistic to those of the proposed classes, and their interests do not conflict with the interests of the proposed class members he seeks to represent.
- of individual actions for the conduct complained of were undertaken, there likely would be inconsistent or varying results. This would have the effect of establishing incompatible standards of conduct for the defendant. Certification of plaintiffs' proposed classes would prevent these undesirable outcomes.
- 158. **Injunctive and declaratory relief:** By way of its conduct described in this complaint, Apple has acted on grounds that apply generally to the proposed classes. Accordingly, final injunctive relief or corresponding declaratory relief is appropriate respecting the classes as a whole.
- 159. **Predominance and superiority:** This proposed class action is appropriate for certification. Class proceedings on these facts and this law are superior to all other available methods for the fair and efficient adjudication of this controversy, given that

joinder of all members is impracticable. Even if members of the proposed classes could sustain individual litigation, that course would not be preferable to a class action because individual litigation would increase the delay and expense to the parties due to the complex factual and legal controversies present in this matter. Here, the class action device will present far fewer management difficulties, and it will provide the benefit of a single adjudication, economies of scale, and comprehensive supervision by this Court. Further, uniformity of decisions will be ensured.

IV. <u>CAUSES OF ACTION</u>

APPLE CAUSES OF ACTION

COUNT I

(Sherman Act § 2)

INTERSTATE RESTRICTION OF SMARTPHONE ENHANCED INTERNET USERBASE ACCESS SERVICES, IOS NOTARY STAMP AND IOS ONBOARDING SOFTWARE MARKETS

- 160. Plaintiffs restate, re-allege, and incorporate by reference each of the allegations set forth in the rest of this Complaint as if fully set forth herein.
- 161. Apple's conduct violates Section 2 of the Sherman Act, which prohibits the "monopoliz[ation of] any part of the trade or commerce among the several States, or with foreign nations". 15 U.S.C. § 2.
- 162. There is a relevant antitrust market for developer userbase access to the smartphone enhanced internet device userbase.
- 163. Apple holds monopoly power in the the market for developer access to the smartphone enhanced internet device userbase. In the US geographic market, iPhone/iPad users represent slightly over half of this market. Apple controls most access to these

users, given their strong preference for local apps (versus websites) and limited functionality of browser SDKs. In other words, a developer of an app that requires SDK cannot access the iOS userbase, without Apple's permission.

- 164. A developer cannot reasonably substitute another userbase, such as Android. They would forego 80% of profits, or 60% of users. For a public health app such as Coronavirus Reporter, this would defeat the functionality of the app. For Bitcoin Lottery, it would halve the lottery size. For CALID and WebCaller, it would curtail a critical mass needed to make the app successful.
- 165. Apple charges developers \$99 annually to purportedly be able to access this userbase, in the form of notary stamps and application loading rentals (see below), which are only selectively given at Apple's "absolute discretion" in the DPLA contract of adhesion.
- 166. There exist related, relevant Sherman markets: 1) the market for iOS app notarization (digital signature) stamps, and 2) the market for iOS app onboarding software. Both are downstream of the smartphone enhanced internet device, and iOS device markets. In the United States, Apple is the only producer in these markets.
- 167. Apple holds monopoly power in the the market for iOS app notarization (digital signature) stamps, and the market for iOS app onboarding software. That is, Apple has a monopoly on the market for iOS app notarization (digital signature) stamps, and the market for iOS app onboarding software.
- 168. Apple unlawfully maintains its monopoly powers in the aforementioned markets, and app submarkets, through its software algorithms that 1) implement a notarization

- requirement requiring Apple's encryption key, and 2) remove application loader onboarding functionality to all non-enterprise iOS users.
- 169. Apple severely restricts interstate commerce of iOS notary stamps, when it denies some 40,000 developers weekly of the stamps they request. It does not sell notary stamps individually, but issues them to developers who pay a \$99 annual subscription fee after submission of an approved app.
- 170. Software loading (onboarding) is a vital component of a computer operating system, and such tools (like the Finder, MSDOS, UNIX) have been around for half a century. Apple's refusal to sell this vital component of an operating system to all non-enterprise users is willful and deliberate restriction of interstate trade, and defies the last half century of best-practices in computing.
- 171. Operating system notary stamps is Apple's algorithmic invention to create an artificial monopoly, not unlike the "taxicab medallion" monopoly. There was, and is, no need for such notary stamps in nearly every other computing platform in history. The iOS requirement of notary stamps is an algorithmic violation of the Sherman Act, and is done so purely with the intent to create a monopoly on such stamps. These stamps are only sold via the iOS Developer Program, which is precisely why some twenty-million developers, mostly students, have had to join this program at an average cost to them of nearly one thousand dollars.
- Apple severely restricts interstate commerce of software onboarding functionality, as it simply does not sell it to end-users, with some minor exceptions in the enterprise market.

- 173. Apple's refusal to sell notarization stamps or onboarding software (which is available in Mac Finder, Android, Windows, and nearly every other major computing platform in history) is intended to harm competition app developers, like Plaintiffs and Class Members.
- The artificial monopoly created by notarization stamps and software onboarding results in damages to nearly twenty million proposed class members of approximately one thousand dollars each. Under treble damages, Sherman Act mandates recovery of \$80 billion USD to these class members. When the stamps aren't issued, further damages accrue from lost app revenues. Even if Apple blocked just one "unicorn" app like Robinhood (\$35 billion valuation) in a decade, Sherman Act provides \$105 billion in treble damages. Of course, Apple gets things wrong much more than once a decade, leading to staggering losses to our economy. In China, "open" app stores are ten times the size of Apple's App Store in China. This is irrefutable evidence of this point on "lost unicorns."
- 175. Plaintiffs CALID and Dr Jeffrey D. Isaacs have both paid nearly a decade in these fees, either directly or through their controlled entities, and therefore have standing to represent the proposed class members. They are first-to-file these claims.
- 176. Apple could exert quality control and law compliance via its App Store, without infringing upon the rights of the consumers, and the developers who serve them. While this lawsuit seeks an injunction eliminating Apple's notarizing requirements, and therefore, exclusive control over the App marketplace, it is worth mentioning Apple refuses to implement even much more minor changes. Specifically, Apple could create an independent App Court that ensures due process in the App Store review process. This

App Court would act independently from Apple Management, and would reduce or eliminate the problem of favoritism and cronyism. Developers who have a grievance about app rejections, unfair ranking suppression and other issues could be afforded due process through said App Court, or outside arbitration, which would function identically.

- 177. Indeed, such an App Court would be a vast improvement over the policy currently in place. Per US House findings, even Apple staff finds Apple's treatment of developers to be breathtaking. Such is the experience of Plaintiffs, in their dealings with app store personnel.
- Apple, an Independent App Court would be the first law enforcement venue solely dedicated to application computer code and digital asset rankings. Apple declined Plaintiffs' proposal in August 2021. As stated, this is a relatively modest intervention compared to the full opening of the App Store being legislated in no less than thirty countries, including the United States³. Apple's refusal to implement this compromise is evidence itself of monopolistic intent. Put simply, Apple "doesn't want to give an inch" on their illegal monopoly.
- Much damage is done to the overall competition within the institutional app markets, as a result of Apple's anticompetitive practices in userbase access, notarization and onboarding. But the damages extend beyond those markets, into the overall US economy, and even public health response, in the case of Coronavirus Reporter. Any Plaintiff or class member with a rejected app was harmed by the aforementioned practices. The vast "network effect" of the nations' trillion-dollar investment in

³ Of course, Plaintiff's contend that the United States already passed laws to open the App Store. These laws, RICO and Sherman Act, were passed in 1970 and 1890, respectively.

smartphone networks is severely curtailed, diminished, bottleneck, and harmed by Apple's algorithmic interstate trade restrictions.

COUNT II (Sherman Act § 2) DENIAL OF ESSENTIAL FACILITY IN THE INSTITUTIONAL APP MARKETS

- 180. Plaintiffs restate, re-allege, and incorporate by reference each of the allegations set forth in the rest of this Complaint as if fully set forth herein.
- 181. Most essential facility cases considered by district courts during the past decade rely on the four prong test enunciated in *MCI Communications Corp. v. American Tel. & Tel. Co.*, 708 F.2d 1081 (7th Cir.), cert. denied, 464 U.S. 891 (1983), a case challenging AT&T's use of local telephone networks to thwart competition in the long distance telephone service market. There, the court held that "to establish liability under the essential facilities doctrine [a plaintiff must show]: (1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility." Id. at 1132-33.
- 182. Apple's conduct completes all four elements of the MCI test.
- 183. Apple competes with develops in the app markets, which are downstream from the smartphone enhanced device market, where it is a monopolist. It is also a monopolist/monopsonist in the institutional app markets.
- 184. Apple controls an essential facility necessary to compete in these markets.
- 185. Apple controls access to the smartphone userbase and institutional app markets through notarization and digital signature requirements, and restriction of onboarding software. A developer is unable compete in the marketplace of apps, without these notary

stamps and application loaders. Apple restricts the entire iOS App marketplace (both sides, institutional and retail) by excluding developers from these two technologies. Notary stamps, application loaders, and contractual iOS userbase access are therefore essential facilities under Apple's control.

- Apple engages in exclusionary behavior that denies essential facilities to Plaintiffs and other app developers. Apple routinely denies notary stamps to developers, as it did with Plaintiffs Coronavirus Reporter, Primary Productions, and Caller-ID. Likewise, it denies application loaders to all except enterprise users, with the exception of short leases on a per-app basis. Contractually, it denies access to the iOS userbase through restrictive DPLA App Store policies.
- 187. Because Apple has its own apps in the competing in the institutional app marketplaces, by definition Apple excludes competitors. Apple does so by leveraging its control over the iOS App Store and operating system.
- 188. App developers are unable to reasonably or practically duplicate the entire infrastructure for the iOS userbase, notary stamps, or application loaders. Duplicating the entire iPhone userbase is about as feasible as recreating a mountain in reference to binding caselaw from *Aspen Skiing Co* (472 U.S. 585, 1985). Likewise, notary stamps cannot be reproduced because they contain encryption codes. Third-party application loaders cannot be added to the iOS it would require rewriting the entire iOS, which is not even technically possible due to hardware controls implemented by Apple. Apple's exclusionary practices, blocking programmers from accessing a network of hundreds of millions of computers, is truly unprecedented.

- 189. In fact, providing tools to access a computing platform userbase is exactly what Apple has done for forty years with the Mac product ecosystem, a respected and successful computing platform.
- 190. Apple's denial of access to iOS users and networks has no legitimate business purpose, and serves only to assist Apple in maintaining its unlawful monopoly position in the increasingly critically important app market.
- 191. Apple's conduct affects a substantial volume of interstate as well as foreign commerce. Apple's conduct has substantial anti-competitive effects, including increased prices and costs, reduced innovation and quality of service, and lowered output.
- 192. As an app developer, Plaintiffs have been harmed by Apple's anti-competitive conduct in a manner that the antitrust laws were intended to prevent. Plaintiffs have suffered and continue to suffer harm and irreparable injury, and such harm and injury will not abate until an injunction ending Apple's anti-competitive conduct issues.
- 193. Apple's exclusionary behavior blocked an entire class of COVID startups from contributing to a public health emergency. Lives were likely lost, and Apple's behavior must now be dealt with by the Court to prevent further damages.
- 194. To prevent these ongoing harms, the Court should enjoin the anti-competitive conduct complained of herein.

COUNT III SHERMAN ACT §1 DPLA AS UNREASONABLE RESTRAINT OF TRADE

195. Plaintiffs repeat and re-allege each and every allegation contained herein as if fully stated under this count.

- 196. Apple's conduct violates Section 1 of the Sherman Act, which prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade of commerce among the several States, or with foreign nations." 15 U.S.C. § 1.
- 197. The relevant market is the U.S. National Institutional App marketplace.

 Alternatively, the relevant market is the U.S. iOS Device App Institutional marketplace.
- 198. The Apple Developer Program License Agreement and the end-user EULA terms of the App Store are contracts that unreasonably restrain competition in the Institutional App Marketplaces. This has an effect of limiting competition in the critically important US institutional app marketplace, and likewise consumer app choice and quality in the retail facing side of the market. Alternatively, the DPLA restricts competition in the single-product iOS Institutional App Marketplace (the developer-facing monopsony).
- 199. Apple has induced and coerced developers to sign and be bound by their contracts of adhesion. The contracts waive Plaintiffs' rights to access the iOS userbase, and allow Apple "carte blanche" to restrict or deny any app, favor competitors and cronies, and/or overcharge, or underpay. Those who do not sign the DPLA are completely blocked from accessing the institutional marketplaces, because they cannot list on the App Store nor can they obtain notary stamps or application loading leases.
- 200. Apple's conduct and unlawful contractual restraints harm a market that forms a substantial part of the domestic economy, the smartphone enhanced internet device app market. Apple holds approximately 60-80% of total commerce in that market, or 100% of the iOS app market alternatively.
- 201. Apple's conduct under purported authority of the DPLA, i.e. determining which applications will or will not be published on the App Store, has substantial anti-

competitive effects, including here an outright bar disallowing any startup from assisting in the pandemic relief, via an app. Plaintiffs Coronavirus Reporter, and CALID, and many other startups wishing to help were barred from doing so, because of Apple's illegal contracts.

- 202. Competition amongst COVID startups may have indeed saved lives, better informed the public, and provided other intangible benefits.
- 203. The restraint in this case is even more severe than it may appear on face value because COVID applications like Plaintiffs' are only useful if they achieve a critical mass of users. Apple's disallowment prevented Coronavirus Reporter and CALID from realizing their full potential on any available device marketplace. In other words, non-Apple device users would have a product with reduced functionality, because of Apple's anticompetitive behavior.
- Apple's conduct caused Plaintiffs substantial injury. Non-startup, permitted apps from recognized institutions that were allowed in March 2020 obtained millions of downloads and a top rank in the App Store, demonstrating the strong demand for COVID information applications at that time.
- 205. Evidence is irrefutable that Apple green-lit an almost identical app, Zoe created by Guy St Thomas and Kings College London, and other later contributors.
- 206. Ironically, after all of these years Apple forgot it was founded in the garage of two independent inventors, the legendary American entrepreneurs Steve Jobs and Steve Wozniak. There was no good reason, decades later, for Apple to mandate that only institutions may contribute to the COVID emergency. This defies Apple's own means of creation. The public can choose which app authors they wish to use, and it is more than

evident that Plaintiff's app, at a time when no other COVID apps existed, would have been downloaded by millions. Here, Apple unlawfully put its thumb on the scales, destroying any chance that Coronavirus Reporter and its fellow startups such as CALID had to participate in the open and free information exchange afforded by the internet. To prevent these harms, this Honorable Court shall permanently enjoin the aforementioned anti-competitive behavior induced by the DPLA.

COUNT IV SHERMAN ACT §2

RANKING SUPPRESSION AS RESTRAINT OF INTERSTATE TRADE

- 207. Plaintiffs repeat and re-allege each and every allegation contained herein as if fully stated under this count.
- 208. Apple's conduct violates Section 2 of the Sherman Act, which prohibits "monopolization of any part of the trade of commerce among the several States, or with foreign nations. 15 U.S.C. Section 2
- 209. The relevant market is the U.S. National Institutional App marketplace.

 Alternatively, the relevant market is the U.S. iOS Device App Institutional marketplace.

 Apple holds monopoly power in these markets for smartphone apps.
- 210. Apple unlawfully restricts trade in the aforementioned markets, through app ranking suppression. When an app isn't listen in a critical directory, such as the App Store rankings, or is ranked below where it should fairly be, fewer customers can discover the app. This results in customers defaulting to bundled apps, i.e. Apple's preinstalled apps, or to Apple's (and cronies) other apps given self-preferential treatment in the App Store rankings. By leveraging its monopoly in the device market, and requiring customers to use the App Store rankings, Apple is able to restrain trade downstream, in the institutional app market.

- By not listing an App correctly on the app store, i.e. suppressing it, the consumers simply cannot find developers through their preferred means of search (App Store). This would be equivalent to a Yellow Pages not listing competitors. When a business isn't listed under the correct keywords, or any keywords, on the primary directory of all iOS apps, interstate commerce is restricted. Transparent information enables efficient commerce; the App Store is the opposite, and results in substantial quantities of lost app installs.
- 212. Apple's conduct in self-preferential App Store rankings restricts interstate trade in these critical markets and must be enjoined by this Honorable Court.

COUNT V (Sherman Act § 1) TYING THE APP STORE, NOTARY STAMPS, AND SOFTWARE ONBOARDING TO THE IOS DEVICE MARKET

- 213. Plaintiffs restates, re-alleges, and incorporates by reference each of the allegations set forth in the rest of this Complaint as if fully set forth herein.
- 214. Apple's conduct violates Section 1 of the Sherman Act, which prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations".15 U.S.C. § 1.
- 215. Through its End User Agreement with iOS users, and its kernel notarization requirements, Apple has unlawfully tied its iOS smartphone enhanced internet access device to the use of its App Store, Notary Stamps, and Onboarding Software.
- 216. Apple has sufficient economic power in the tying market, the Smartphone Device and/or iOS Device market, because it holds 60% and 100% of these markets, respectively. Moreover, the iOS Device user often is locked in to their device, or has substantial barriers to exit. As such, the iOS user has no choice but to accept the App Store offerings (Apple's curated apps, favoring their own competing products), Notary

Stamp requirement, and onboarding software offerings (which are available for \$299 to enterprise users and a near-infinite price to consumers) which are mandated by the EULA.

- 217. Apple is able to unlawfully condition access to iOS device to the use of a second product—App Store app marketplace. Through its End User License Agreement and unlawful policies, Apple expressly conditions the use of its devices on its "walled garden" app store market which is subject to severe bottleneck contraint on the developer institutional side (see above). This amounts to a *per se* unlawful tying arrangement, and a dangerously inefficient one that denies users the benefit of the network they invested in.
- 218. The tying product, Apple's iOS device, is distinct from the tied product, Apple's App Store. App developers such as Plaintiffs have apps, and effectively their own "app store" that would be trivial to launch on their website, but for Apple's EULA and notarization requirements. In other words, end users are coerced into using the App Store, and everybody (including developers) pay the consequences. Apple's unlawful tying arrangement thus ties separate products that are in separate markets and coerces Plaintiffs and third-party end users to rely on both of Apple's products. For the same reasons consumers have standing in *Pepper*, developers have standing here to challenge EULA policies that affect them.
- 219. Secondly, Apple is able to unlawfully condition access to iOS device features and network effects on the end-users use of a second product—notary stamps. Through its algorithmic control of the iOS kernel, the end user effectively is contractually (algorithmically) bound to use apps with Notary Stamps. Developers are unable to

purchase them, to the tune of 40,000 denials per week. This amounts to a *per se* unlawful tying arrangement, and a dangerously inefficient one that denies users the choice and selection of diverse apps.

- 220. The tying product, Apple's iOS device, is distinct from the tied product, notary stamps, because such a "permission ticket" to launch an app is separate from a smartphone, even though most other platforms don't require it. Apple's unlawful tying arrangement thus ties two separate products that are in separate markets and coerces Plaintiffs and third-party end users to rely on both of Apple's products. Apple created an artificial demand for notary stamps using their kernel algorithms and EULA.
- 221. Third, Apple is able to unlawfully condition access to iOS device features and network effects on the end-users use of a second product—onboarding software. Smartphone devices owners using Apple's iOS must purchase software installation tools from them, aka onboarding software. No other major computing platform requires this secondary purchase, except for Apple. Apple is the only retailer of onboarding software, which is offered to enterprise users for \$299. It is only offered to consumers via the App Store, where they effectively "rent" the onboarding software on a per-app basis. Hence, Apple doesn't sell fully functional onboarding software to consumers, it only makes it available for rent on a case-by-case basis. Effectively, this means Apple charges an infinite price to consumers for its onboarding software. This amounts to a *per se* unlawful tying arrangement, and a dangerously inefficient one that denies users the choice and selection of diverse apps.
- 222. The tying product, Apple's iOS device, is distinct from the tied product, onboarding software, because such "installation program" to launch an app is separate

from a smartphone, even though most other platforms don't require it. Apple's unlawful tying arrangement thus ties two separate products that are in separate markets and coerces Plaintiffs and third-party end users to rely on both of Apple's products. Apple removed best-practice OS functionality and transferred app loading capabilities to the App Store, where it is effectively leased under strict control using their kernel algorithms and EULA.

- 223. Apple's conduct has foreclosed, and continues to foreclose, competition in the iOS App Market (Institutional and Retail) affecting a staggering volume of commerce in these markets. By way of reference, the Chinese app markets are nearly four times the size of any US market, which is in large part due to the increased competition in that country. Likewise, competition is severely foreclosed in the notary stamp and onboarding software markets.
- Apple has thus engaged in a *per se* illegal tying arrangement and the Court does not need to engage in a detailed assessment of the anti-competitive effects of Apple's conduct or its purported justifications.
- 225. In the alternative only, even if Apple's conduct does not constitute a *per se* illegal tie, an analysis of Apple's tying arrangement would demonstrate that this arrangement violates the rule of reason and is illegal by coercing end-users into using its App Store, notary stamps, and onboarding software.
- 226. Apple's conduct harms those Plaintiffs and class members which, as a direct result of Apple's anti-competitive conduct, are receiving infra-competitive fees on institutional app sales to monopsonist Apple, and cannot sell their work-product to consumers directly, as they lack the ability to onboard it, and even if they could, it would not be notarized.

- As app developers that offer iOS apps, Plaintiffs have been refused notarization, Plaintiffs and class members have a direct financial interest in the App Store's institutional side, notary stamp prices and availability, and onboarding software prices and availability. They have been foreclosed from competing with Apple directly as a result of Apple's unlawful tie.
- The U.S. Supreme Court has held that "the answer to the question whether one or two products are involved turns not on the functional relation between them, but rather on the character of demand for the two items." Thus, the most important factor in determining whether two distinct products are being tied together is whether customers want to purchase the products separately. If customers are not interested in purchasing the products separately, there is little risk the tie could foreclose any separate sales of the products. Here, all three tied products meet the SCOTUS requirement for consumer interest. Clearly, consumers are interested in purchasing apps separately from smartphones. Consumers also want permission to run these apps (notary stamps), and fought for "jailbreaking rights" to SCOTUS, which was granted. Lastly, there is little question of demand for convenient, reasonably priced "onboarding software:" The Mac "Finder" revolutionized such an easy-to-use launching GUI, and arguably, is the reason Apple exists today.
- 229. A party seeking to defend such a *per se* tying arrangement on the basis of competitive justifications bears a heavy burden of proof; the defense is difficult to establish and has been successful only under limited circumstances. For these reasons, the Court should approve the Preliminary Injunction ending notarization requirements, filed simultaneously with this Amended Complaint.

230. Plaintiffs have been harmed by Apple's anti-competitive conduct in a manner that the antitrust laws were intended to prevent. Plaintiffs suffer harm and irreparable injury, and such harm and injury will not abate until an injunction ending Apple's anti-competitive conduct issues. To prevent these ongoing harms, the Court should permanently enjoin the anti-competitive conduct complained of herein.

<u>COUNT VI</u> (SHERMAN ACT 15 U.S.C § 2) VIOLATION OF SHERMAN ACT § 2 – \$99 FEE ILLEGALITY

- 231. Plaintiffs repeat and re-allege each and every allegation contained herein as if fully stated under this count.
- 232. Apple's conduct violates Section 2 of the Sherman Act, which prohibits "monopolization of any part of the trade of commerce among the several States, or with foreign nations. 15 U.S.C. Section 2
- Alternatively, the relevant market is the U.S. iOS Device App Institutional marketplace.

 These markets, collectively the "US Institutional App Marketplaces" are downstream of the smartphone enhanced internet device, and iOS device markets, respectively. In simple terms, there is a market for apps, which Apple itself competes in with their proprietary apps.
- Apple holds monopoly power in the market for smartphone enhanced commerce and information flow (devices and apps) transacted via the national internet backbone.

 That is, Apple has a monopoly on the US iOS device market, smartphone market, smartphone app market, and iOS app market.
- 235. Apple unlawfully maintains its monopoly powers in the aforementioned markets, and app submarkets, by issuing an illegal demand of money from 20 million aspiring

- developers. Apple extracts \$99 each year from any aspiring developer many being college students or recent, indebted graduates if they wish to access the iOS userbase or get their software notarized to run on an iOS device.
- 236. The Congressional Subcommittee refers to this as an illegal tax that may have amounted to nearly \$20billion over the last ten years. The Subcommittee states that the \$99 fee is nowhere near Apple's actual cost to notarize and run the software platforms.
- 237. Indeed, Epic's findings of facts, incorporated herein, devoted much time to elucidate how Apple, under Steve Job's promise to charge developers just enough to cover Apple's costs, evolved into one of the largest illegal taxes in history. Epic's discovery of this matter is particularly useful to protect the rights of our class members (Epic did not file a class action), and Plaintiffs' counsel is grateful for the work Epic and Cravath conducted to uncover this illegal tax.
- By way of comparison, Google charges \$25 to developers to join their program, and this is optional. Any developer may write an Android app and sell it to a consumer for sideloading, without Google's permission. It is mystifying that the US Government has actively pursued Sherman Act claims against the Google Play Store, but won't even answer (see below claim) complaints to the FTC concerning Apple's far more egregious behavior. To pursue antitrust actions against Android, when it permits application loading, does not require notary stamps, and charges one-quarter Apple's developer fees is a double-standard.
- 239. Not only are Apple's fees an illegal tax of nearly \$1000 to each of these developers over their career, but they heavily impede interstate commerce. A developer who does not pay this tax, perhaps because they cannot afford it, will not produce apps.

App output is restricted unless one assumes that 100% of developers can afford to pay this tax without consequence to their productivity. Clearly such an assumption is not reasonable. Hence, interstate commerce of valuable digital assets – iOS apps— is severely restricted by this illegal demand.

240. The illegal demand to 20 million developers – nearly every computer programmer on the planet – is used to fund the growth of Apple's monopoly, and must be enjoined by this Court, as mandated by the Sherman Act. The intent and wishes of Steve Jobs must be upheld.

COUNT VII - CAMERON ANTITRUST CLASS ACTION OPT-OUT

- This Amended Complaint focuses on redress for developers of free apps, and those forced to pay Apple's \$99 annual fee. Neither of these classes were certified in any other pending US civil lawsuit, and hence, this lawsuit is first-to-file. Nonetheless, the above Plaintiffs that had non-zero priced apps or IAP opted-out of the *Cameron* settlement to pursue these claims. Had they opted in, they would have been forced to sign a release that may have absolved Apple of damages for free apps and \$99 annual fees.
- 242. As such, Plaintiffs like CALID and Dr. Isaacs had approved apps that generated IAP receipts, suffered damages that have not been compensated by prior settlements.
- As noted, this lawsuit was deemed not subject to consolidation with *Cameron* by the Honorable Yvonne Gonzalez-Rogers. In order to streamline litigation, and to avoid confusion, Plaintiffs CALID and Jeffrey Isaacs assert claims for non-zero price apps as specified in the already docketed complaint *Cameron v. Apple*. These causes of action, and all supporting facts from that complaint are incorporated herein, as if they had been stated in the Amended Complaint. Should any portion of *Cameron's* claims contradict the

above Amended Complaint, the Amended Complaint shall supersede. Plaintiffs' counsel sought to stipulate with Apple to avoid this complication, but Apple refused to agree that *Cameron's* claims stated a claim for relied, which seems unusual considering Apple has entered into a proposed \$100m settlement in that case.

COUNT VIII BREACH OF CONTRACT

- 244. Plaintiffs and Defendant Apple had entered into a contract, notwithstanding the aforementioned components whereby Plaintiff had no real choice as to the terms.
- 245. Apple's Developer Agreement as amended in March 2020 promised that entities with "deeply rooted medical credentials" were permitted to publish COVID apps on the App Store.
- 246. Dr Robert Roberts, and his agents, CALID and Coronavirus Reporter, have deep rooted medical credentials. The company spent years developing a telehealth platform, served eighty million FDA side effect profiles to ten million people, had the first mover COVID symptom tracker, three physicians on board, a co-founder on Columbia University's Patient Safety Counsel, and had institutional backing from University of Arizona's head of translational research.
- A startup is an entity, with credentials equal to or greater than the sum of the intrinsic and inherent credentials possessed by its founders. In other words, common sense dictates that a startup headed by Dr Roberts has at least the credentials of Dr Roberts. A startup logically cannot have less, or fewer, credentials that its founders. Hence, Plaintiff is a startup, or corporate entity with deep credentials.
- 248. Plaintiff's small team of experts was comparable to the development team sizes of other apps Apple permitted to be published on the App Store. Namely, the Zoe Guys' St

Thomas app was developed primarily by two scientists, and though they possessed impressive medical credentials, they did not have some sort of credential that would legally amount to "more deeply rooted" or unilaterally above and beyond Dr Roberts' expertise.

- 249. Dr Robert Roberts extensive CV (Exhibit B) was provided to Apple leadership, documenting his deep rooted medical credentials and willingness to bring "institutional" resources to the project from University of Arizona.
- 250. Apple willfully ignored Dr Roberts' credentials, and therefore, the deep-rooted credentials of his organization, Coronavirus Reporter.
- 251. As Chief Medical Officer of Coronavirus Reporter, Dr Roberts had absolute authority over the medical app.
- 252. As Dr Roberts noted in his CNBC interview, many inventions throughout the history of the industrial revolution and modern medicine were produced by "startup" entities comprised of one or two scientist inventors.
- 253. As such, historic and reasonable interpretation of "deep rooted" credentials sufficient for important inventions supports a contract interpretation favorable to Plaintiff.
- 254. Apple breached their own Developer Agreement when they refused to allow an entity with deep-rooted medical expertise, and a renowned institution's resources in support thereof, to publish on the App Store.
- 255. To the extent Apple claims the DPLA grants them unlimited discretion with respect to App approvals, Plaintiff submits that discretion implies a reasonable standard which was breached. Apple's motivation was to further their own app and apps of

partners; this was not an instance of discretion pertaining to Dr Roberts, which would be baseless. As such, a jury may find that reasonable discretion was not employed, but rather, anti-competitive behavior was employed, which is wholly different from reasonable discretion. Furthermore, discretion is narrowed by various state and federal laws, and must not be discriminatory in nature and cannot violate any protection laws or commerce laws. Moreover, discretion implies adherence to the covenant of good faith. In light of this context, whether Apple exercised discretion, as opposed to unfair competitive advantage or discriminatory bias, in rejecting a life-saving app designed by a renowned cardiologist is a matter for the jury to decide after full and complete discovery on the matter.

- 256. Discovery is anticipated to reveal that Apple did in fact violate federal competition laws, California competition laws, and/or anti-discrimination statutes when they banned Coronavirus Reporter. Apple has already filed pleadings asserting that a director's head injury in 1997 is relevant to CALID's credentials. Apple counsel refused to retract the pleading statement as irrelevant. Plaintiff reserves the right to bring claims under California anti-discrimination law regarding Apple's assertion a director's prior brain injury is somehow relevant to CALID's medical credentials.
- 257. Indeed, Plaintiffs' claim of pretextual App Review decisions to deny nearly a dozen apps almost certainly do fraudulent breach of this contract and any fair discretion it may have bargained for.
- 258. In sum, Apple's refusal to publish Plaintiffs' apps caused the damages described in this Complaint. Refusal to publish Coronavirus Reported entailed blocking access to

the national internet backbone during a national emergency; this exceeds any reasonable 'discretion' bargained for by the DPLA.

- 259. No "meeting of the minds" occurred between the parties in the DPLA. The DPLA discretion provisions granting Apple "blank check" absolute discretion should be voided as part of the contract interpretation. Plaintiffs had absolutely no say in the contract formation, and their objection to it would likely end their career as a software developer. Under the civil principles of contract dissolution and voiding, the DPLA, or at least certain portions, meets all the elements for dissolution, based on the facts contained in this Amended Complaint.
- A baseline estimate of contractual losses assumes Coronavirus Reporter lost five million users/day over a two-year period, because rival apps with nearly identical functionality that launched months later easily obtained this milestone. Based on comparable analysis of COVID media channel revenue rates, spanning from television news networks providing COVID news (e.g. CNN) to websites to apps, Coronavirus Reporter would have generated no less than two hundred million dollars of income, had it been properly allowed. Alternatively, and preferably, the app would have had sponsorships such as vaccine campaigns that brought in non-advertising revenue. To the extent Plaintiff would have re-invested that income into COVID research, further accumulative losses to society are hereby alleged.

COUNT IX BREACH OF THE COVENANT OF GOOD FAITH AND FAIR DEALING

261. In choosing to develop an app for Defendant's Apple iPhone, Plaintiffs relied on the covenant of good faith and fair dealing.

- 262. In every contract there is an implied covenant of good faith and fair dealing by each party not to do anything which will deprive the other parties of the benefits of the contract, and a breach of this covenant by failure to deal fairly or in good faith gives rise to an action for damages.
- 263. Indeed, Apple breached the covenant when, during an international pandemic emergency, they disregarded established medical hierarchies and blocked Dr Roberts from using the internet to help people disseminate epidemiological data.
- Apple had been on a mission, for at least two years, to make their own mark in medicine, with Mr. Cook declaring Apple's greatest contribution to mankind would be in medicine.
- 265. There was no good faith when Apple focused on their own success, and blocked a research professor such as Dr Roberts, who had saved countless lives through his lifelong dedication to the field of cardiology.
- 266. Apple's breach of the covenant caused substantial damages to Plaintiff and well beyond, blocking Dr Roberts app from playing its role in the reduction of its potential to help reduce SARS-CoV-2 coronavirus transmission.

COUNT X RACKETEER INFLUENCED CORRUPT ORGANIZATION ACT

- 267. **18 U.S.C. § 1962(c),** known as RICO, has a broad reach to prosecute civil and criminal activity that occurs within otherwise law-abiding businesses, and which may fall through the cracks of other statutory law such as Sherman.
- 268. Plaintiffs hereby reallege and reincorporate all prior portions of this Amended Complaint, and assert that these known facts constitute a RICO cause of action.

- Defendant Apple and its cronies formed an enterprise meant to exploit the work of developers by screening their ideas for purported compliance with DPLA, meanwhile lifting and appropriating their ideas into their own competing apps, and suppressing the original creators' work by blocking app store distribution. This resulted in the most profitable corporation in history, Apple, and profits to cronies who participated in the scheme. This was not a zero-sum game; Apple's profits came at the expense of the original developers, who lost their fair reward for innovating and creating new apps. The value that stems from a software product (advertising revenues, goodwill, etc.) was transferred from the rightful developer, to Apple and its cronies, by the enterprise. An enterprise also was formed to discredit these developers, and in particular, the Plaintiffs.
- 270. Apple is named as Defendant for this RICO claim under the principle of respondeat superior. The Ninth Circuit has adopted the reasoning of Petro-Tech⁴ and Liquid Air, holding that liability may arise under § 1962(a) under respondeat superior principles "when the individual or entity is benefited by its employee or agent's RICO violations." Here, Apple's App Review team carried out the enterprise, along with senior Apple management, PR firms, law firms, and rival developer cronies. Apple clearly benefited from the scheme, but the scheme (favoring cronies, in particular) was not completely sanctioned by Apple. Hence the enterprise is not in identity with Apple itself,

⁴ Several courts of appeals and district courts have ruled that *respondeat superior* is appropriate under § 1962(c) when the party to be held vicariously liable is not the alleged enterprise, and also was the central figure or aggressor in the alleged scheme. In *Bloch v. Prudential-Bache*, the defendants were Prudential-Bache brokers involved in the fraudulent sale of a limited partnership. The plaintiffs argued that Prudential-Bache should be vicariously liable as the brokers' employer but did not allege that Prudential-Bache was the RICO enterprise. The district court agreed, noting that this was a case which involved common law principles of *respondeat superior*, and therefore was not controlled by the Third Circuit's decision in *Petro-Tech, Inc. v. Western Co.*The court distinguished *Petro-Tech* because the plaintiffs in that case had named the defendant as the RICO enterprise, and were therefore attempting to circumvent the person/enterprise distinction by holding the defendant vicariously liable rather than directly liable. The *Bloch* court relied upon a footnote from *Petro-Tech* which stated that "there could be circumstances in which the common law of *respondeat superior* would hold an employer liable even when the employer did not benefit from the employee's conduct."

even though in some cases such as Facetime 15 there was official sanctioning. Even assuming, *arguendo*, that such identity of person and enterprise exists, the solution would be to name an Apple shareholder or director as person(s). This seems unnecessary, and Plaintiffs note their intent to avoid doing so, particularly given the Ninth Circuit standard.

271. Moreover, when a corporation engages in a pattern of racketeering activity through legal entities beyond its control, such as independent banks, law firms, accounting firms, or public relations firms, the person / enterprise distinction will more than likely be satisfied. Living Designs, Inc. v. E.I. Dupont De Nemours and Co., 431 F.3d 353, 362 (9th Cir. 2005). This is precisely the case here. Apple, named as defendant person-entity in this Amended Complaint, associates RICO enterprise work with numerous other entities beyond their control. Most obvious are the crony app developers, all too content to accept payment for their copycat apps. Component manufactures are locked into special deals with Apple, so if developers were to undertake the massive effort of recreating a competing iOS device, it would be nearly impossible. Further out, Apple's law firms have been paid tens of millions to draft the DPLA contract of adhesion that intentionally obfuscates Apple's monopsony and unilateral control of the App Store. PR firms spread Apple's gospel, squelching stories of Plaintiffs and class members. There can be little doubt Apple's PR department conveys massive amounts of "spin" and "propaganda" literature to news outlets to delay, distract, and "smokescreen" Apple's anticompetitive agenda. Although CNBC's Kif Leswing interviewed Dr. Roberts, oddly, he never ran the story. Just yesterday, he ran an astounding article suggesting to Apple stock holders that Apple will get away with "one rule at a time" App Store changes rather than "structural changes." The article wrongly asserted that developers had settled their

claims, completely ignoring this case which he spent 45 minutes interviewing Plaintiff about. *Cameron* is only a proposed settlement at this time, and Plaintiffs are in process of filing an *amicus* document informing that court of their concerns with the settlement. News agencies and reporters are denied access to Apple PR if they run negative press about the company, furthering the enterprise. The tentacles of the alleged enterprise expand to numerous independent firms, associated-in-fact, that benefit from the scheme.

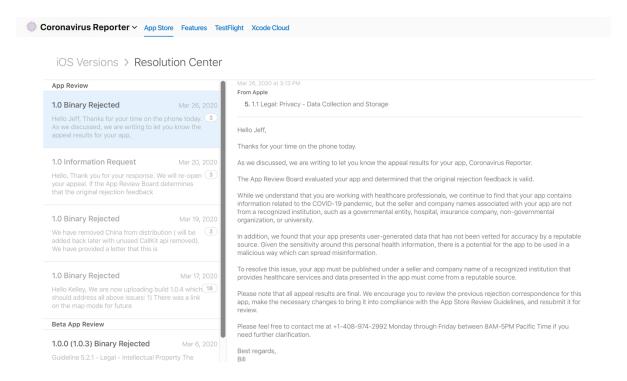
- 272. In most cases, Apple alone could not carry out the scheme. They required a crony's pawn app to divert profits. In the case of Caller-ID, Orave's "Reverse Lookup" pawn app was designated the profits and rankings that Plaintiff had previously earned. In the case of Primary Productions, other giveaway apps received all such diversion of ranking efforts. In short, Apple built a curated, walled garden in concert with partners who would benefit, and did so do drive out competition, often stealing their ideas in the process.
- 273. Therefore the enterprise includes individuals within Apple App Store management, App Review, certain counsel who serve as business strategy administrators to perfect the DPLA that is so central the scheme, and cronies who pawn their copycat apps. Discovery will identify the exact individuals involved, which varies depending on each particular app involved in the scheme. App Store review team and Apple Senior Management are alleged to have participated in the scheme and are identified by first name in the below interstate communications. Upon information and belief, junior employees partnered with cronies who offered kickbacks or other preferential treatment, and Senior Apple management may not have been aware, or turned a blind eye. Plaintiffs

notified Tim Cook of cronyism concerns in April 2020 and never received any reply, nor did the practices stop.

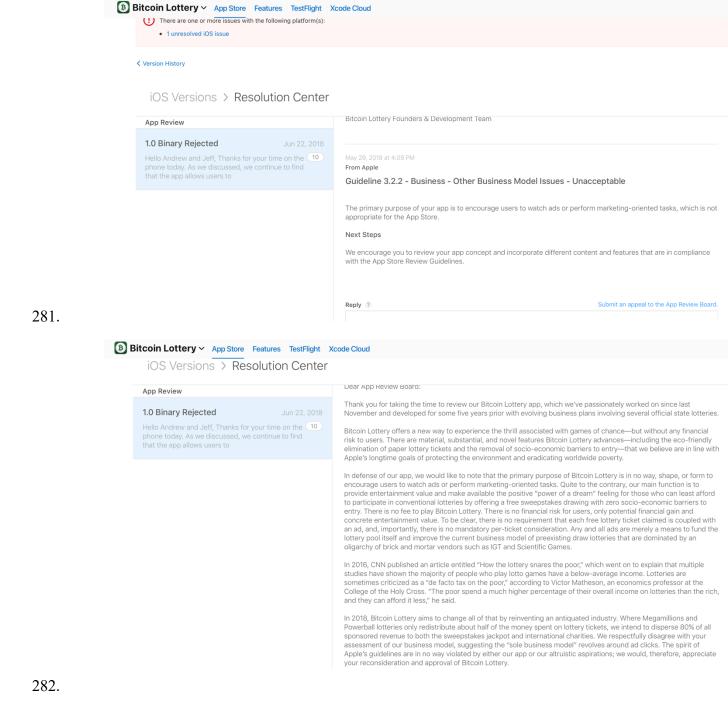
- A large portion of Apple's employees, such as the programmers and retail staff, were likely unaware of said scheme. The enterprise sub-group at Apple engaged in a distinct pattern of predicate acts over a multi-year timespan.
- 275. Most notably, Defendant Apple routinely engaged in wire fraud and mail fraud by assigning junior App Review members to issue false, pretextual reasons for rejection to small developers. Senior management knew of this practice and instructed said junior app reviewers to issue these statements by telephone calls whenever possible. Indeed, Apple's written reasons for rejection often differed substantially from reasons given by telephone.
- 276. Specifically, members of the enterprise caused App Store Connect electronic communications to be relayed via interstate means, that contained knowingly false content meant to mislead and or defraud developers into abandoning their apps, and/or believing their apps were not viable or legal, when in fact, they were. They did so with the purpose of shifting "zero-sum" app installs and clicks to their own competing apps and or those of cronies. They were able to do so because they had removed application loaders from iOS and required notary stamps.
- In the case of Plaintiff Coronavirus Reporter, App Review indicated to them that their app could not be distributed to iOS userbase because it contained non-vetted medical information, in other words, self-reported COVID symptoms. This statement was false, as Apple allowed other apps to be distributed (Guys' UK) that used such "non-vetted" data. Secondly, App Review indicated that Coronavirus Reporter did not have deep medical credentials, which was false, as the company was lead by Dr. Roberts and

had additional credentials described in this pleading and known to Apple no later than March 6, 2020.

278. One such false wire communication is the following:

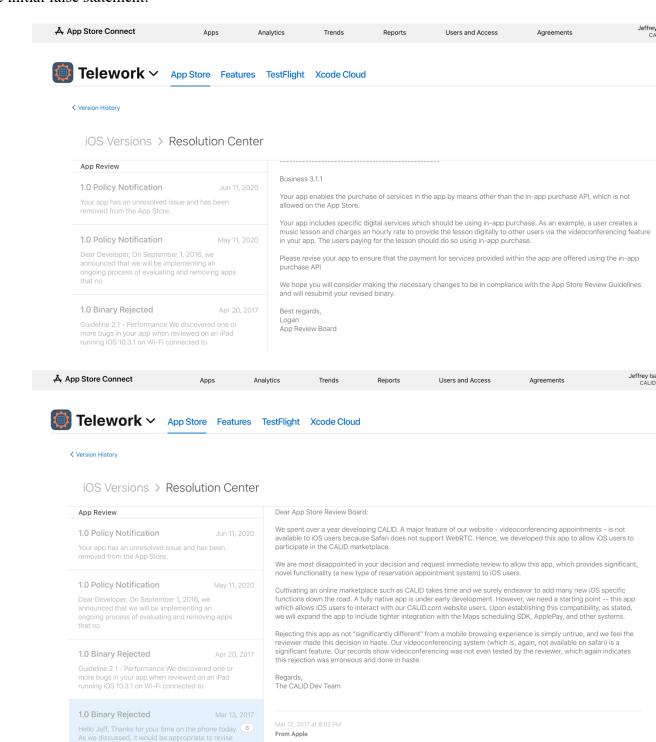


- In the case of Primary Productions, App Review teammate Erica indicated to the company on multiple phone calls and App Store Connect communications that their Bitcoin Lottery app was not eligible for distribution because its sole purpose was to engage in clicking. But this was knowingly false, as Andrew emailed Mr. Oliver and explained that crony HiQ also had giveaway rewards, and that their product was the result of much work to engage users in the "dream" of winning the lottery. Clearly, Apple has 2 million apps on the App Store, and one doesn't need to look far to see far more trivial, "clickbait" apps than Andrew's Bitcoin Lottery, which cost \$90,000USD to develop in the Ukraine.
- 280. Examples of fraudulent wire communications to Primary Productions include:



283. In the case of CALID, Plaintiff was told their app offered no functionality beyond a website. This plainly false communication was countered by Plaintiff, who informed Apple it was one of the first WebRTC interfaces available to iPhone users to connect to

platform-independent videoconferencing. After CALID added IAPs, Apple relented on the initial false statement:



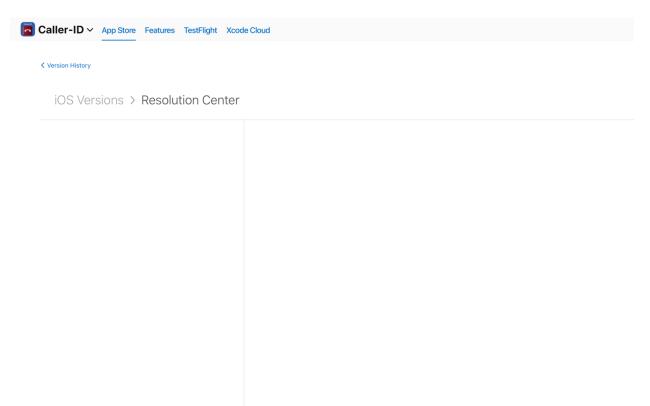
Design - 4.2

Your app provides a limited user experience as it is not sufficiently different from a mobile browsing experience. As

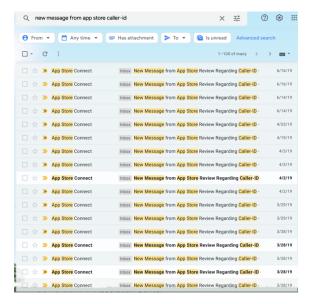
284.

Caller-ID apps, he was demoted from Top-10 Reference ranking to the bottom of the App Store. An Apple crony, "Orave" in Israel, designed by a novice programmer upon information and belief, replaced it in the top charts. Apple then issued fraudulent communications to Dr. Isaacs – nearly thirty of them over a month – that his Caller-ID app violated, in unspecified ways, Apple's privacy concerns. The CNAM technique is used by hundreds of millions of iOS users a day, and it is false to state it is a privacy violation. Of particular concern, all of these communications seem to have recently disappeared from Dr. Isaacs' App Store Connect portal, unlike the above Plaintiffs' communications which remain intact. Further investigation into this potential evidence spoliation is warranted. The correspondence evidenced the substantial distress it caused, over a one month period, when a developer of a previously Top 10 product struggled to understand Apple's false statements. Said developer modified the product nearly twenty times, trying to appease Apple's fraudulent requests.

287. A "blank screen" which appears to indicate spoliation of Apple's false, harassing interstate wire communications directed at the Top 10 ranked Caller-ID app.



288. Evidence of "Resolution Center" messages that no longer exist:



290. Evidence of copy-cat Caller-ID app by Orave that replaced Caller-ID in the App Store rankings:



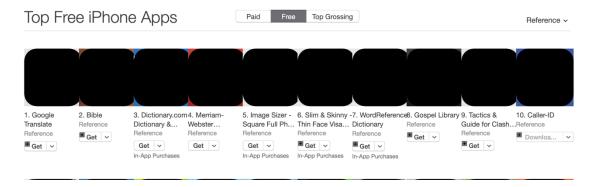


291.





292. August 25, 2015 App Store ranking showing Dr. Isaacs' Top-10 invention of free web caller ID, which has reached over 300 million users and saved the US economy over 100 million USD:



- 293. Prosecuting Counsel has requested Apple voluntarily produce all App Store rejections, or preserve them. Apple has refused to do either. It is expected that discovery will yield thousands of additional instances of wire fraud predicate acts targeting unknowing developers.
- 294. Apple suppressed competitors in App Store rankings, hiding quality apps from the general public when it suited Apple's own interests. This represents an additional pattern of wire fraud predicate act.
- 295. Defendants engaged in witness retaliation, as noted in a US Congressional Subcommittee report (see Statement of Facts).
- 296. In this particular case, Apple and their counsel filed false pleadings in court and relayed to media outlets accusing Plaintiff a group of physicians trying to save lives of 'disregard for the law' in stating an anti-trust complaint that was largely similar or identical to anti-trust complaints filed by the FTC, the congressional subcommittee, and President Biden's executive order.

- Apple counsel last week incredulously threatened Plaintiffs yet again, with baseless allegations their seeking redress against Apple's false 'disregard for the law' statement is itself improper. In other words, Apple is not only saying that Plaintiffs filed a lawsuit "in disregard for the law," but Apple now says Plaintiffs' protest of this is in disregard for the law. Relentless attacks against small developers, to the point of witness intimidation, deserve to be heard by a jury.
- 298. In the case of Primary Productions, member Andrew engaged in substantial correspondence with Apple's App Review team and Apple management. Andrew was misled, lied to, and defrauded by the App Review board and Apple management, in what amounts to wire fraud under applicable RICO provisions.
- 299. In one protracted call with App Reviewer Erica, Andrew explained how disappointed he was to work on this app for years, only to be told that it was "illegal gambling." Andrew explained that must be an error, as other Apps such as "HiQ" offer free giveaways, but aren't considered to violated Apple's gambling rules.
- 300. Each time Andrew mentioned these inconsistencies, Erica would become uncomfortable and tell him to "worry about his own app, not others." While this advice might be suited to some circumstances, in the competitive App marketplace, and antitrust legal analysis, such "comparable analysis" Andrew tried to engage in was perfectly reasonable, and in fact, represents the correct legal standard to apply here.
- 301. Not convinced that he had a fair discussion with Erica and the App Review Board, Andrew reached out to App Store Chair Carson Oliver. Oliver was provided with detailed business plans, and spoke with Andrew by telephone. During that call, he admitted that the App Review team was "wrong" to accuse Primary Productions of

- "illegal gambling," but stated he would revert back to him about "click baiting" "frivolousness." Oliver never got back to Andrew, despite multiple follow-up emails from Oliver.
- This represents a pattern of ongoing fraud perpetuated by Apple against multiple Plaintiff-Developers (or potential class members) they treat not only with disdain, but with dishonesty that constitutes a stream of predicate acts as per RICO.
- As one can plainly observe from the above App Store connect images, Apple always has an excuse to deny competing apps, based on the thinnest of pretenses. Whether it was "non-vetted" COVID symptoms, Caller-ID privacy, lottery "click-baiting" or CALID cross-platform "similarity to the web," Apple's never ending jar of excuses cause ongoing, substantial harm to developers.
- 304. Indeed, the Congressional Subcommittee approaches this topic and describes the fear developers live in of Apple's "tyranny."
- 305. Here, Apple retaliated against a valid patent proceeding, which at least until it was incorrectly invalidated by Whitepages, should have been treated as enforceable. In related cases, Apple sought to name witnesses that had been under FRCP witness protection anonymity, and Apple did not follow customary, appropriate routes to challenge anonymity. These retaliatory actions from a pattern, and were done with intent to harass a witness, a patent holder, a member of the proposed Class, discredit him or her, and or place him or her in fear.
- 306. Apple sought to name witnesses that had been under FRCP witness protection anonymity, and Apple did not follow customary, appropriate routes to challenge

anonymity. This was done with intent to harass a witness, a member of the proposed Class, discredit him or her, and or place him or her in fear.

- 307. Apple has profited greatly by said racketeering their own apps and their cronies' apps have ousted competition from the App Store marketplace, and they block every developer in the world from reasonably free access to the national smartphone enhanced internet backbone, while assessing tens of billions in subscriptions to these aspiring developers.
- 308. Plaintiffs request civil damages, injunction, and/or joinder of the United States to prosecute RICO violations by Apple.

COUNT XI FRAUD

- The elements of fraud are (a) misrepresentation (false representation, concealment, or nondisclosure); (b) knowledge of falsity (or "scienter"); (c) intent to defraud, i.e., to induce reliance; (d) justifiable reliance; and (e) resulting damage.' "

 (Lazar v. Superior Court (1996) 12 Cal.4th 631, 638.) To maintain any fraud action, a plaintiff must show that he or she changed position in reliance upon the alleged fraud and was damaged by that change of position. (Civ. Code, § 1709.) For example, in Lazar, evidence that the plaintiff had quit his job and moved across the country in reliance upon the defendant's misrepresentations, would have been sufficient to demonstrate a detrimental change of position. (Lazar v. Superior Court, supra, 12 Cal.4th at p. 639.)
- 310. Apple's aforementioned conduct meets all elements for fraud.
- 311. As evident from the Plaintiffs' case studies, Apple App Store review staff routinely made false statements to Plaintiffs and class members, alleging the app store didn't allow "non-vetted" symptoms (it did for Guys UK), didn't allow sweepstakes apps

- (it did for HQ), didn't allow Caller-ID for privacy reasons (it did for Orave), and so on, and so on. 40,000 times a week App Store review staff convey misrepresentations to mostly unknowing and naïve developers.
- Apple intends to defraud to limit competition and reward business partners (cronies). Apple disfavors apps that don't use Swift, and issues fraudulent rejections more frequently against non-Swift apps. Similarly, a cross-platform app like WebCaller that defeats Apple's efforts to "lock in" iOS ecosystem users is a likely target of ranking suppression or improper app rejection. Other motives likely exist that will be revealed in discovery. A clear case of intent to defraud was Apple's demoting Caller-ID two hundred ranking spots, just months after a patent claim was made that would have cost Apple substantial losses from Whitepages and other infringers. Apple harassed one Plaintiff by sending him thirty messages of unspecified privacy concerns in Caller-ID, over a one month period, effectively forcing a wild goose hunt for a non-existent privacy leak. These messages all thirty disappeared from the App Store Connect portal, and likely represent a predicate act in above RICO claims for evidence destruction, but certainly constitute fraud.
- Justifiably, developers rely upon Apple's App Review statements. Most of the twenty million developers have little basis for comparison. In Plaintiffs' case, they sometimes "caught on" after observing a pattern over years. But rejection is hard on developers, and most, including Plaintiffs, tended to believe Apple's lies, at least at first.
- Damages are vast. Apps are never approved, under the thinnest of pretenses, and a developer foregoes all benefit of their work product, which may amount to a lost career, major financial harm, and other substantiated losses.

- 315. Developers frequently change their position as a result of Apple's misrepresentations. Some developers may abandon an app, or run out of money to continue development. They might even abandon iOS app development, or their entire career as a programmer. Discovery will yield a significant number of unfortunate stories of developers who believed Apple's false App Review correspondence. In Primary Productions and Coronavirus Reporter's case, the team members were split between those who believed Apple's correspondence, versus those who were skeptical. In each case, the corporation followed those who believed Apple, and abandoned the project believing it was not allowed on the App Store. Only after a year or two did the corporation realize and decide to initiate this lawsuit.
- A developer of a great app may feel their app was a failure, when in fact, it was suppressed on the App Store. This suppression is a false statement Apple has "manual actions" that are effectively communications and decisions by an App Store member to de-rank an app. This results in its ranking in the charts being lowered, which the developer observes. As such, the developer receives and relies upon fraudulent rank lists as a result of manual action "suppression."
- As for the named Plaintiffs they monitored rankings of their suppressed apps and gave up on further development, believing there was no market for their product. In the case of WebCaller, the massive market (unlocked by Zoom, FaceTime 15, etc) could not be overstated, but for a year or so, Plaintiff was duped into thinking his WebCaller weblink idea just didn't have a use.

In fact, there is considerable pressure to limit a users daily time on devices, especially children. For example, China last week limited the hours a child can use games such as Apple Arcade. As such, app developers are in a 'zero-sum game' competing with one another for installs, screen time, and clicks. Significantly, this means that Apple's fraudulent practices are conducted with the intent to take app installs and clicks, i.e. money, from the victims and convey it do themselves and/or their cronies.

PERMANENT INJUNCTION

RESTRAINING SHERMAN ACT AND RICO VIOLATIONS

- 319. The Court shall enter a permanent injunction, enjoining and restraining Defendant Apple from further anticompetitive restraints on the app markets, as regulated by the Sherman Act. Likewise, Apple shall cease enterprise predicate acts, pursuant to RICO, exploiting the work-product of small developers. Specifically, the permanent injunction shall enjoin Apple from:
- 320. Executing code in the iOS kernel that, when a user requests to launch an app, checks for the presence of Apple's digital signature, and disables launch if such signature is nonexistent. ("Eliminate Notary Stamp Requirement")
- 321. Executing code in the iOS kernel that prevents a user from downloading, transferring, or otherwise receiving and installing an application from sources other than the App Store, including the Safari browser, Airdrop/Bluetooth, and other routine file transfer mechanisms. ("Eliminate Finder/Application Loader disabling")

322. Blocking, rejecting, or banning any App Store third-party developer app submission for any reason. ("Eliminate App Store App Review wire fraud & self-preferential behavior"). By way of exception, Apple may prohibit any app if:

i) the submitted app clearly executes instructions or contains content that violates local, state, national, and/or global laws and treatises. Due Process must exist at the governmental level to determine such violation; Apple may not employ editorial censorship, political fact checking, and other such purported law enforcements devoid of Due Process.

- ii) the submitted app executes instructions that could reasonably likely cause device malfunction, incomplete execution, or device failure.
- 323. Taxing developers a mandatory \$99 annual subscription fee to access App Store submission protocols. Developers may voluntarily join Apple's Developer Program, as they did for decades with the Mac. Developers may also join a limited developer program, at a market-reasonable rate, to obtain notary stamps certifying their app to be free of malware and certifying an age appropriateness rating. Apple may "enable by default" an iOS control requiring notary stamps whose purpose and function is limited to malware scanning and parental control age certification, which is exactly what the MacOS does today. This default behavior may be switched off by any user who possesses legitimate reasons to run non-notarized software.

FTC CAUSE OF ACTION

Violation of 5 U.S.C. § 706(1), agency action unlawfully withheld or unreasonably delayed

- Plaintiffs reallege and incorporate all prior portions of this Complaint.
- The Administrative Procedure Act ("APA") dictates that agencies must conclude matters presented to them "within a reasonable time." 5 U.S.C. § 555(b). APA Section 706(1) authorizes reviewing courts to "compel agency action unlawfully withheld or unreasonably delayed." 5 U.S.C. § 706(1).
- 326. On March 12, over six months ago, counsel for Plaintiff Coronavirus Reporter submitted an antitrust complaint to the FTC, requesting assistance in prosecuting civil and criminal violations of the Sherman Act. The request was sent to FTC email hotline, antitrust@ftc.gov.
- 327. Plaintiff Coronavirus Reporter has no response on file as of today.
- 328. FTC's failure to issue a decision on Coronavirus Reporter's complaint constitutes agency action unlawfully withheld, violative of Section 706(1) of the APA. Alternatively, FTC's failure to act on Plaintiff's complaint constitutes agency action unreasonably delayed, again violative of Section 706(1) of the APA.
- 329. In the meantime, Apple has subjected Plaintiff to now eight months of abusive litigation tactics, including filing false federal court pleadings (picked up by the press) that Plaintiff's claims verge on "disregard for the law." Plaintiff's claims are nearly identical to international consensus in the US House, Senate and thirty other countries concerning App Store anticompetitive behavior. To assert Plaintiff's antitrust allegations disregard the law illustrates Apple's manifest denial of international consensus.
- 330. The wit, the relief sought by Plaintiffs ending App Store exclusivity is the exact same relief sought by a bipartisan "Open App Markets" Senate bill, the entire EU, UK, and Australia. South Korea ended App Store exclusivity this week. Russia fined

Apple earlier this summer. While antitrust law may differ slightly between countries, it is reasonable to state that many countries, including our own, have concluded the App Store is a monopoly. Hence when Apple files oppositional documents that our claims are "in the hinterlands," it disrespects conclusions reached their due deliberation in the EU, UK, and our own Senate. Plaintiffs eight months of due diligence in researching Apple's Sherman compliance is simply the exact opposite of "disregard for the law." FTC can conclude Apple engages in harassing tactics to subvert Sherman litigation.

- 331. Dr Roberts, who has saved countless lives, does not deserve such wrongful treatment and litigation conduct, which could be easily avoided if the FTC improved guidelines and procedures for antitrust complaints against "Big Tech," and/or certified "right-to-sue" antitrust letters as other government agencies do.
- 332. The FTC mission in fact requires the FTC to investigate such egregious actions by a monopoly. This is particularly the case when the subject of the actions is a physician who merely questioned Apple's anticompetitive practice as did thirty other countries (EU members) of blocking startups from assisting with COVID.
- 333. Plaintiffs seek FTC charge Apple with appropriate Sherman civil and criminal penalties. Additionally, Apple has engaged in a pattern of wire fraud to further their monopoly which should be sanctioned under applicable code.
- 334. It is recognized that last month President Biden issued new executive orders directing the FTC to better address anti-competitive behavior against small tech companies, such as Plaintiff. "Executive Order on Promoting Competition in the American Economy" specifically tasks FTC to use its statutory rulemaking authority to address "unfair competition in Major internet marketplaces."

335. It is therefore hoped that any claims against FTC for non-action, arbitrary, and/or capricious enforcement of Sherman will be rendered moot by compliance with the President's directive. FTC assistance and guidelines for enforcing these relatively new app marketplace claims would substantially reduce burden on small startups, and moreover, the Court. It is therefore requested the agency investigate Plaintiffs' complaint, take decisive action, and notify the Court of said action.

WHEREFORE, The Plaintiffs and class members respectfully request that this Honorable Court:

- A. Certify this case as a developer class action lawsuit and that it certify the proposed federal law classes on a nationwide basis for all developers of apps that were disallowed or subject to ranking suppression, or subject to excessive \$99 annual subscription fees.
- B. Order treble damages compensating the Class Members, estimated to approach \$200 billion⁵ USD, and to Lead Plaintiffs in the amount of \$14,200,000,000 USD:
 - a. Plaintiff Coronavirus Reporter, the first-mover in the COVID informatics sector, suffered losses of no less than \$600 million in goodwill, sponsorships, costs and charges.
 - b. Plaintiff CALID, an early 2016 mover in the telehealth sector, suffered platform losses of no less than \$400 million in brand goodwill, revenues, operating costs and charges.

⁵ By creating an inefficient bottleneck on the entire institutional app market, Apple put itself in a precarious liability position for lost value creation. Take for example the Robinhood IPO, which carried a \$35 billion valuation. If Apple blocked just one single app from succeeding at this level, it would be liable for \$105 billion (3x punitive). Our estimate assumes 500 apps were suppressed or rejected, with an average valuation of \$60million. This equates to \$90 billion in damages, and approaches \$200 billion when ten years of \$99 developer fees are factored in. Put differently, \$200 billion is approximately ten percent of Apple's market valuation, and it seems reasonable that the aforementioned anti-competitive behaviors would have accrued at least a 10% accrual to Apple's worth. Apple's restrictive practices create negative externalities: thousands of rejected apps represent substantial lost value creation to the US economy.

- c. Plaintiff Primary Productions' "Bitcoin Lottery" suffered losses amounting to
 \$900 million in revenues and fees.
- d. Plaintiff Dr Jeffrey Isaacs' top ranked Caller-ID app suffered losses amounting to \$300 million. His cross-platform weblink videoconference "WebCaller" application, which was completely lifted by Apple to create FaceTime 15, suffered losses greater than \$12 billion USD.
- C. Issue a permanent injunction under the Sherman Act restraining Defendant Apple from denying developers access to the smartphone enhanced Internet userbase; from requiring notary stamps to launch an iOS application, from disabling best-practice OS application loaders, and from charging \$99 annual taxation fees to twenty million iOS developers, and any and all other anticompetitive behavior the jury finds.
- D. Grant any further relief as may be fair and just.

Respectfully submitted, this 6th day of September 2021.

/s/ Keith Mathews

Keith Mathews

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/s/ Jeffrey Isaacs

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Pro se

CERTIFICATE OF SERVICE

I, Keith Mathews, do declare as follows:

I certify that a copy of the foregoing was delivered electronically to counsel for the Defendants with counsel, and emailed to those without known counsel.

Executed on this 6th day of September 2021.

/s/ Keith Mathews
Keith Mathews